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Climate change and its possible security implications

Report of the Secretary-General**

Summary

Both governmental views and relevant research on the security implications of climate change, by and large, approach the question from a perspective of interdependence between human vulnerability and national security. They identify five channels through which climate change could affect security:

(a) **Vulnerability**: climate change threatens food security and human health, and increases human exposure to extreme events;

(b) **Development**: if climate change results in slowing down or reversing the development process, this will exacerbate vulnerability and could undermine the capacity of States to maintain stability;

(c) **Coping and security**: migration, competition over natural resources and other coping responses of households and communities faced with climate-related threats could increase the risk of domestic conflict as well as have international repercussions;

(d) **Statelessness**: there are implications for rights, security, and sovereignty of the loss of statehood because of the disappearance of territory;

(e) **International conflict**: there may be implications for international cooperation from climate change's impact on shared or undemarcated international resources.

* A/64/150 and Corr.1.

** The delay in the submission of the present report was due to extensive gathering of views of Member States and United Nations organizations on which the report is based in a short period of time between the adoption of the resolution mandating the report (3 June 2009) and the submission date.

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Climate change is often viewed as a "threat multiplier", exacerbating threats caused by persistent poverty, weak institutions for resource management and conflict resolution, fault lines and a history of mistrust between communities and nations, and inadequate access to information or resources.

The present report identifies several "threat minimizers", namely conditions or actions that are desirable in their own right but also help to lower the risk of climate-related insecurity. These include climate mitigation and adaptation, economic development, democratic governance and strong local and national institutions, international cooperation, preventive diplomacy and mediation, timely availability of information and increased support for research and analysis to improve the understanding of linkages between climate change and security. Accelerated action at all levels is needed to bolster these threat minimizers. Most urgently, a comprehensive, fair and effective deal in Copenhagen will help to stabilize our climate, protect development gains, assist vulnerable nations adapt to climate change and build a more secure, sustainable and equitable society.

Beyond this, the report identifies a set of emerging climate change-related threats which merit the focused attention and increased preparedness of the international community, namely, those that appear highly likely, are large in magnitude, may unfold relatively swiftly, and are unprecedented in nature, including: loss of territory, statelessness and increased numbers of displaced persons; stress on shared international water resources, for example, with the melting of glaciers; and disputes surrounding the opening of the Arctic region to resource exploitation and trade. This is not an exhaustive list, as new challenges may warrant the attention of the international community in future.

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I. Introduction

1. The present report has been prepared in response to the request of Member States, in General Assembly resolution 63/281, for a comprehensive report to the Assembly at its sixty-fourth session on the possible security implications of climate change, based on the views of Member States and relevant regional and international organizations. A total of 35 Member States, 4 Member State groups, and 17 regional and international organizations, including agencies and programmes of the United Nations, have made submissions to the Secretariat in reference to that resolution,[1] and the report endeavours to reflect those views in the light of the relevant research.

2. The nature and full degree of the security implications of climate change are still largely untested. The present report seeks to organize the views of Member States as well as relevant research on the subject in a framework that is evidence-based, drawing on the most recent available data and research, and most conducive to policy guidance. Its goal is to outline the possible channels through which adverse implications for human or national security might occur, what form they could take, and what combinations of actions could avert them. Its policy focus is first and foremost on ways in which possible security implications of climate change could be prevented.

3. The emphasis on prevention is consistent with the efforts of the United Nations to move from a culture of reaction to one of conflict prevention, as well as its emphasis on sustainable development as a crucial contributor to conflict prevention. Advancing sustainable development, building resilience to physical and economic shocks, and strengthening institutions will pay a double dividend — helping to confront climate change and promoting peace and security.

4. Authoritative studies of the economics of climate change such as *The Stern Review*[2] find that the costs of preventing dangerous climate change, while not trivial, are far outweighed by the eventual costs of unmitigated climate change. That result, moreover, does not take into account the difficult-to-measure but real costs of such "socially contingent" impacts of climate change as social and political instability, conflicts and involuntary migration, or the measures taken in response to these. Were those to be included, the cost advantage of prevention would be even greater — a message broadly consistent with my argument in successive reports that the prevention of violent conflict is far more cost-effective than remediation (see A/55/985-S/2001/574 and Corr.1; A/58/365-S/2003/888; and A/60/891).

5. Before examining the evidence on climate change and its security implications, a brief introduction is needed on definitional and methodological questions, namely, the concepts of human vulnerability and national security and the treatment of uncertainty.

6. The principal focus in the present report is on the security of individuals and communities. It reflects the spirit of many submissions from Member States and is

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[1] Submissions of those Member States that have not indicated otherwise are posted on the website of the Department of Economic and Social Affairs Division for Sustainable Development at http://www.un.org/esa/dsd/resources/res_docugaecos_64.shtml.

[2] Nicolas Stern, *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2007).

consistent with the suggestion of the *Human Development Report 1994* that, for ordinary people, "security symbolized protection from the threat of disease, hunger, unemployment, crime, social conflict, political repression and environmental hazards".[3] There is a growing recognition, reflected in many of the submissions, of the mutual interdependence between the security of individuals and communities and the security of nation States.

7. Secondly, any analysis of climate change and its impacts, including possible security implications, must grapple with uncertainty.

8. While climate modelling has made considerable advances in forecasting the future behaviour of natural systems over long time spans, the science of climate change and its physical impacts still confronts a number of uncertainties — for example, with respect to the magnitude, geographical extent and timescale of given impacts.

9. In moving from physical to social and political processes, the degree of uncertainty increases significantly. Yet, as a sustained body of information, data, and analysis becomes available, and in particular with the greater availability of geo-spatial data, the domain of uncertainty should shrink and it should become possible to assess the probabilities of different outcomes as well as the relative contributions of different factors.

10. Given both the complexity and the magnitude of the potential consequences of the relationship between climate change and security, the present report proposes two courses of action: first, to accelerate action on potential win-win options in order that the most damaging consequences can be avoided; and secondly, to focus international attention on areas where the impacts already appear highly likely, are large in magnitude, unfold relatively swiftly, have potentially irreversible consequences (the concept of "tipping points"), impose high costs on human life and well-being, and may require innovative approaches because of their unprecedented nature (for example, loss of territory and statelessness). Many share the view that it would be advisable for the international community to keep a watching brief on these and other possible security implications of climate change.

II. Channels linking climate change and security

11. Many Member State submissions recognize that the possible security implications of climate change need to be examined in the context of pre-existing social, economic and environmental threats, or stresses, which are key factors in the security of individuals, communities and States. These include the factors that were highlighted by the Millennium Summit — the persistence of poverty, hunger and disease; the rapid growth of informal urban settlements with substandard shelter and inadequate infrastructure and services; high unemployment, particularly of youth; and the growing scarcity of land, water and other resources.

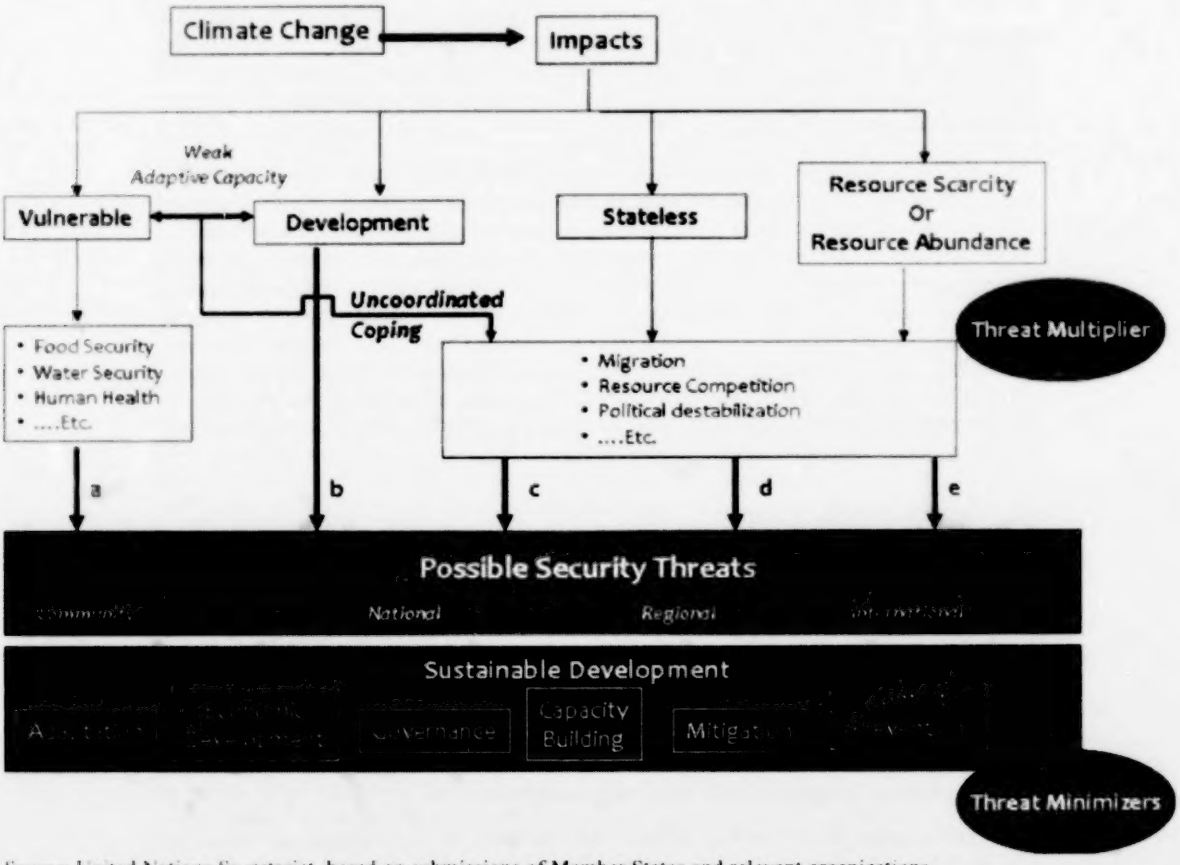
12. The magnitude of specific threats, the resilience of individuals, communities and societies and their capacity to adapt effectively to those threats — all bear on the security implications of climate change. Where climate change threats to human

[3] United Nations Development Programme, *Human Development Report 1994* (Oxford University Press, 1994), chap. 2.

well-being are expected to be severe, particularly where people are especially vulnerable because of low levels of human development and weak institutions of governance, the security implications are apt to be most pronounced, including the possibility of social and political tensions and of armed conflicts. On the other hand, many Member States have expressed the view that threats can and should be reduced through sustainable development, including legitimate and effective governance institutions, as well as peaceful dispute resolution.

13. In this regard, it is useful to think of climate change as a threat multiplier, namely as a factor that can work through several channels (see figure below) to exacerbate existing sources of conflict and insecurity. By the same token, conditions, policies, institutions and actions which serve to relieve and manage stresses effectively can be considered threat minimizers.

Threat multipliers and threat minimizers: the five channels



Source: United Nations Secretariat, based on submissions of Member States and relevant organizations.

14. The first channel runs from climate change impacts to threats to the well-being of the most vulnerable communities. Submissions in this vein sometimes identify climate change as a threat to human rights. The United Nations human rights treaty

bodies all recognize the intrinsic link between the environment and the realization of a range of human rights, such as the right to life, to health, to food, to water and to housing (see A/HRC/10/61).

15. A second channel runs from climate change impacts to economic development. From this perspective, a halt to or significant slowdown of growth caused by climate change could pose a serious security threat to developing countries, not least by worsening poverty and desperation. Growth is seen as important to strengthening resilience, maintaining political stability, increasing the attractiveness of cooperation and providing hope to underprivileged populations.

16. A third channel refers to the second-order effects of unsuccessful adaptation in the form of uncoordinated coping or survival strategies of local populations. In this context, submissions have referred to involuntary migration, competition with other communities or groups over scarce resources and an overburdening of local or national governance capacities. Such trends can manifest themselves in the form of localized conflicts or spill over into the international arena in the form of rising tensions or even resource wars.

17. A fourth channel, presented in detail in the submissions from small island developing States, runs from the threat posed by climate change to the viability and even survival of a number of sovereign States, in particular through sea-level rise and the resultant loss of national territory. Principal concerns are how to minimize the risk of such loss and how to cope with the remaining risk — of statelessness, displaced populations and territorial disputes with neighbours over exclusive economic zones.

18. A fifth channel runs from climate change to changes in natural resource availability or access and the resultant competition and possible territorial disputes between countries. This may be because of worsening resource scarcities (e.g., shared waters) or the sudden expansion of shared or undemarcated resources. In the latter category is the possibility of exploiting newly accessible natural resource deposits and transport routes through the Arctic.

19. Of these five channels, the first is well researched and documented, including by the Intergovernmental Panel on Climate Change (IPCC) Working Group II. With regard to the second channel, the relationship between development and peace was high on the research agenda in the 1960s and 1970s (under the framework of political development) but only recently has there been renewed research interest.[4] There is a general consensus in the submissions that the maintenance of global peace and stability requires the continuation of the development momentum. On the third channel, extensive research has taken place under the title of environmental security, including migration pressures and environmental stress as a source of conflict. However, while this research has improved the understanding of specific situations, it has not provided clear general conclusions. In particular, the potential linkages and interplay between climate change and security issues are mediated by a number of contextual factors — including governance, institutions, access to information and external resources and availability of alternatives. Broadly speaking, the literature reveals and several submissions recognize the need for more

[4] See P. Collier, "Development and conflict", Department of Economics, University of Oxford, 2004.

systematic research to distinguish between different causal and contextual factors and clarify policy options.[5,6]

20. There is little empirical research on the fourth channel, as it is one that poses truly unprecedented challenges to States and to the international community. Regarding the fifth channel, two observations can be made. First, the scarcity of shared resources (especially water) has often provided an incentive for transboundary cooperation. The question is how existing agreements and institutions can be reinforced so as to continue to function effectively in the face of increased scarcity. Secondly, in the case of resource abundance, there are examples of international cooperation that could be built upon, though in several countries resource abundance has been associated with domestic conflict.

21. The remainder of the report is structured around these five channels through which climate change can impact on security, namely by: increasing human vulnerability; retarding economic and social development; triggering responses that may increase risks of conflict, such as migration and resource competition; causing statelessness; and straining mechanisms of international cooperation. Section VIII looks at responses to the threats outlined in the preceding sections conceived as preventive measures designed to minimize climate change itself and its possible development and security threats. The final section suggests how the international community can prepare itself to address those serious and seemingly unavoidable threats that loom on the horizon.

III. Threats to human well-being

22. The Fourth Assessment Report of IPCC *Climate Change 2007* is an authoritative source for the science of climate change and its impacts. Yet, recent scientific literature suggests that certain impacts may be occurring at a faster rate and/or on a larger scale than is reflected in that report.[7]

23. Global mean temperature has increased by around 0.74° C over the past century, and past emissions are estimated to involve some unavoidable further warming (about a further 0.6° C by the end of the century relative to 1980-1999), even if atmospheric greenhouse gas concentrations were to remain at 2000 levels. If greenhouse gas emissions continue to rise at their current pace and atmospheric concentrations are allowed to double from their pre-industrial level, the world faces an average temperature rise of between 1.8 and 4.0 degrees Celsius this century.

24. Global average sea level rose at a rate of 1.8 [1.3 to 2.3][8] mm per year from 1961 to 2003 and at a rate of about 3.1 [2.4 to 3.8] mm per year from 1993 to 2003.

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[5] I. Salehyan, "From climate change to conflict? No consensus yet", *Journal of Peace Research*, vol. 45, No. 3 (2008). In recent years, a body of research has found a link between natural resource abundance (oil, diamonds, etc.) and violent conflict, yet the hypothesized link from climate change to conflict often runs through resource (water, land) scarcity.

[6] H. Bulhaug and others, *Implications of Climate Change for Armed Conflict*, Social Development Department, World Bank (Washington, D.C., 2008).

[7] See the proceedings of the International Scientific Congress on Climate Change, held in Copenhagen from 10-12 March 2009; Congress synthesis report available from http://climatecongress.ku.dk/pdf/synthesisreport/.

[8] Numbers in brackets represent 90 per cent confidence intervals around a best estimate. Source: IPCC Fourth Assessment Report, Synthesis Report and Summary for Policymakers.

In the past decade and a half, thermal expansion of the oceans has contributed about 57 per cent of the total sea-level rise, with decreases in glaciers and ice caps contributing about 28 per cent and losses from the polar ice sheets contributing the remainder.[9] Projections of the response of the Antarctic and Greenland ice sheets are still highly uncertain, but new research suggests sea-level rise of a metre or more by 2100.[7]

25. There is evidence of an increase in intense tropical cyclone activity in the North Atlantic since about 1970, with more limited evidence of increases elsewhere. IPCC projects a likely increase in tropical cyclone activity with further warming and, with less confidence, a global decrease in tropical cyclone numbers. There will also very likely be precipitation increases in high latitudes and will likely be precipitation decreases in most subtropical land regions, continuing observed recent trends.[10]

26. The impacts of climate change on human well-being will depend in the first instance on the actions of the international community to control greenhouse gas emissions and slow climate change. It is for this reason that the world needs a climate change deal in Copenhagen that is science-based, comprehensive, balanced and equitable and fair for the future of human beings.

27. Even with an ambitious agreement, the world is already set to experience some climate change over the coming century and beyond. Without such a deal, climate change and its impacts are likely to be much farther reaching and more severe. Those impacts depend also on individuals' and communities' degree of exposure, vulnerability and adaptive capacity. Adaptive capacity in turn depends on a number of factors, including the income, health and education of the population, social capital, the effectiveness of government and other institutions, and, especially for the most vulnerable developing countries, the availability of external resources to support adaptation, as pointed out in a number of submissions.

28. The impacts of climate change on human well-being can work through several pathways, including impacts on: food production and food security, for example, linked to water scarcity, land degradation, and desertification; health and the incidence of various vector-borne diseases; the frequency and intensity of extreme weather events, including flooding, drought and tropical storms; and sea-level rise. The last two types of impact have particularly severe consequences for human settlements and population displacement. The more dependent are people on climate-sensitive forms of natural capital, the more at risk are they from climate change.[11]

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[9] Contribution of Working Group I to the IPCC Fourth Assessment Report, Synthesis Report, Summary for Policymakers, Sect. 3.

[10] IPCC Fourth Assessment Report, chap. 4, sects. 4.6, 4.8 and chap. 5, sect. 5.5.

[11] J. Barnett and W. Adger, "Climate change, human security and violent conflict", in *Political Geography: Special Issue on Climate Change and Conflict*, R. Ragnhild Nordås and N. P. Gleditsch, editors, vol. 26, No. 6 (August 2007).

29. The table below provides a summary from the IPCC Fourth Assessment Report of the major impacts of climate change.

Examples of possible impacts of climate change

Examples of possible impacts of climate change due to changes in extreme weather and climate events, based on projections to the mid- to late 21st century. These do not take into account any changes or developments in adaptive capacity. The likelihood estimates in column two relate to the phenomena listed in column one. (Table 3.2)

Phenomenon[a] and direction of trend	Likelihood of future trends based on projections for 21st century using SRES scenarios	Examples of major projected impacts by sector			
		Agriculture, forestry and ecosystems	Water resources	Human health	Industry, settlement and society
Over most land areas, warmer and fewer cold days and nights, warmer and more frequent hot days and nights	*Virtually certain*[b]	Increased yields in colder environments; decreased yields in warmer environments; increased insect outbreaks	Effects on water resources relying on snowmelt; effects on some water supplies	Reduced human mortality from decreased cold exposure	Reduced energy demand for heating; increased demand for cooling; declining air quality in cities; reduced disruption to transport due to snow, ice; effects on winter tourism
Warm spells/heat waves. Frequency increases over most land areas	*Very likely*	Reduced yields in warmer regions due to heat stress; increased danger of wildfire	Increased water demand; water quality problems, e.g. algal blooms	Increased risk of heat-related mortality, especially for the elderly, chronically sick, very young and socially isolated	Reduction in quality of life for people in warm areas without appropriate housing; impacts on the elderly, very young and poor
Heavy precipitation events. Frequency increases over most areas	*Very likely*	Damage to crops; soil erosion, inability to cultivate land due to waterlogging of soils	Adverse effects on quality of surface and groundwater; contamination of water supply; water scarcity may be relieved	Increased risk of deaths, injuries and infectious, respiratory and skin diseases	Disruption of settlements, commerce, transport and societies due to flooding; pressures on urban and rural infrastructures; loss of property
Area affected by drought increases	*Likely*	Land degradation; lower yields/crop damage and failure; increased livestock deaths; increased risk of wildfire	More widespread water stress	Increased risk of food and water shortage; increased risk of malnutrition; increased risk of water- and food-borne diseases	Water shortage for settlements, industry and societies; reduced hydropower generation potentials; potential for population migration
Intense tropical cyclone activity increases	*Likely*	Damage to crops; windthrow (uprooting) of trees; damage to coral reefs	Power outages causing disruption of public water supply	Increased risk of deaths, injuries, water- and food-borne diseases; post-traumatic stress disorders	Disruption by flood and high winds; withdrawal of risk coverage in vulnerable areas by private insurers; potential for population migrations; loss of property
Increased incidence of extreme high sea level (excludes tsunamis)[c]	*Likely*[d]	Salinisation of irrigation water, estuaries and freshwater systems	Decreased freshwater availability due to saltwater intrusion	Increased risk of deaths and injuries by drowning in floods; migration-related health effects	Costs of coastal protection versus costs of land-use relocation; potential for movement of populations and infrastructure; also see tropical cyclones above

Source: IPCC Fourth Assessment Report, table SPM.3.

Notes:

[a] Contribution of Working Group I to the Fourth Assessment Report, table 3.7, for further details regarding definitions.

[b] Warming of the most extreme days and nights each year.

[c] Extreme high sea level depends on average sea level and on regional weather systems. It is defined as the highest 1 per cent of hourly values of observed sea level at a station for a given reference period.

[d] In all scenarios, the projected global average sea level at 2100 is higher than in the reference period. The effect of changes in regional weather systems on sea level extremes has not been assessed.

30. All of these impacts may lead to increased poverty and the reversal of development achievements, including progress towards the Millennium Development Goals. As many least developed countries are both highly exposed and highly vulnerable to climate change, and as the poor within countries are usually the most vulnerable, climate change is likely to exacerbate inequalities both between and within countries.

A. Agriculture and food security

31. Cereal productivity is expected to decrease in low latitudes (see table above), and Africa and South Asia face especially high risks of reduced crop productivity. In some African countries, yields from rain-fed agriculture could be reduced by up to 50 per cent by 2020.[12] Food security is likely to suffer and the risk of hunger to increase. Poor people in developing countries are particularly vulnerable given their dependence on agriculture for their livelihoods, often farming marginal lands. Among them, women, children, the elderly and disabled as well as indigenous people and minorities are disproportionately affected since they usually represent the most economically and socially marginalized groupings.

32. The serious impacts of the recent global food price crisis on food security and malnutrition in vulnerable countries is suggestive of what might occur, possibly on a much larger scale, in the event of future food shortages exacerbated by climate change. Social protests and unrest occurred in a number of countries and cities around the world. These impacts are not limited to changes in developing countries. One of the triggering factors in the recent food crisis was the drought and crop failure in Australia, which is not only a major world exporter of food grains but also susceptible to the impacts of climate change.

B. Water

33. According to projections, the number of people at risk from increasing water stress will be between 0.4 billion and 1.7 billion by the 2020s, between 1.0 billion and 2.0 billion by the 2050s and between 1.1 billion and 3.2 billion by the 2080s.[13] Increased water stress will be especially prominent in drylands, which are home to over 2 billion people or 35 per cent of the world's population and approximately half of all people living in poverty.[14] Water insecurity linked to climate change threatens to increase malnutrition by 75-125 million people by 2080.[15]

34. Widespread mass losses from glaciers and reductions in snow cover over recent decades are projected to accelerate throughout the 21st century, reducing water availability and hydropower potential and changing seasonality of flows in regions supplied by melt-water from major mountain ranges (e.g., Hindu-Kush, Himalaya, Andes).[15]

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[12] IPCC Fourth Assessment Report, Synthesis Report, sect. 3.3.2.

[13] B.C. Bates and others, editors, *Climate Change and Water*, IPCC Technical Paper (Geneva, June 2008).

[14] John Morton and Simon Anderson, "Climate change and agrarian societies in drylands", 2008.

[15] United Nations Development Programme, *Human Development Report 2006: Beyond scarcity: Power, poverty and the global water crisis* (2006). Available from http://hdr.undp.org/en/media/HDR06-complete.pdf.

35. Reliable access to freshwater is a necessary prerequisite for ensuring the human habitability of islands. Small-island developing States are highly vulnerable to worsening water scarcities. By mid-century, climate change is expected to reduce water resources in many small islands to the point where they become insufficient to meet demand during low-rainfall periods.[16] As shifts in rainfall patterns are expected to increase the frequency and intensity of droughts, a single prolonged drought can have serious consequences and can lead to the rapid depletion of an island's surface and groundwater resources.[17]

C. Health

36. The lack of access to safe drinking water is a major cause of morbidity and disease. According to the World Health Organization (WHO), 2.2 million people die each year from diarrhoea, mostly infants and young children. As WHO notes, higher temperatures and too much or too little water can each facilitate the transmission of diarrhoea. As noted above, climate change is expected to increase rainfall variability in some areas.

37. Besides reinforcing conditions for the transmission of diarrhoea, climate change is expected to have a number of other negative health impacts: disease susceptibility from malnutrition; death, injury and disease from extreme weather events; heat stress and cardiovascular illness from elevated ground-level ozone in urban areas; and the number of people at risk of dengue fever. There may also be positive health impacts, for example, fewer deaths from cold exposure; and mixed effects, for example, with respect to range and transmission potential for malaria.[18] Overall, it is expected that the negative effects will outweigh the positive ones, especially in developing countries.

38. The negative health effects will be felt disproportionately in sub-Saharan Africa, South Asia and the Middle East. Such health impacts in turn can reduce resilience and the capacity of individuals and communities to adapt to climate change.

D. Coastal areas, human settlements and infrastructure

39. Climate change, in particular rising sea levels, could make entire areas uninhabitable. Coastlines are particularly vulnerable to inundation and shoreline erosion, which also lead to freshwater shortages and disease outbreaks. Given that over a third of the world's population lives in coastal zones within 100 km of the shore, the effects on human settlements could be highly disruptive.[19]

40. Rapid urbanization, especially in coastal cities and cities in mega-deltas, has increased human vulnerability to climate change significantly, as underlined in a number of submissions. The number of people living in cities in developing

[16] IPCC Fourth Assessment Report, Synthesis Report, sect. 3.3.2.

[17] Contribution of Working Group II to the IPCC Fourth Assessment Report, chap. 16, executive summary.

[18] IPCC Fourth Assessment Report, Synthesis Report, sect. 3.3.1.

[19] UNEP, *Marine and Coastal Ecosystems and Human Well-Being: A synthesis report based on the findings of the Millennium Ecosystem Summit* (2006).

countries is predicted to rise from 43 per cent in 2005 to 56 per cent by 2030.[20] Millions more people than today are expected to be flooded each year by 2080.[21] In Asia, the coastal and poor mega-cities of Chennai (2005: population 6.9 million), Dhaka (12.4 million), Karachi (11.6 million), Calcutta (14.3 million) and Mumbai (18.2 million) are located only a few metres above sea level. In West Africa, the 500 km of coastline between Accra (Ghana) and the Niger delta (Nigeria) is expected to become a continuous urban megalopolis of more than 50 million inhabitants by 2020.[22] In North Africa, the Nile Delta is one of the most densely populated areas of the world and is highly vulnerable to sea-level rise.

41. The new migrants from rural areas are usually poor and many live in substandard housing in informal settlements, often on fragile hillsides or riverbanks that are highly exposed to extreme weather events (see A/HRC/10/61). The most direct risks are from flooding and landslides as a result of increases in rainfall intensity and from sea-level rise and storm surges in coastal areas.[23]

42. Sea-level rise from climate change is projected not only to expose coastal areas to increased risks, including coastal erosion and flooding, but also to cause loss of habitat and livelihood for people. One recent study of sea-level rise and storm surges finds very heavy potential losses associated with a 1-m sea-level rise and storm surges concentrated in a few countries within each region, with highly vulnerable cities clustered at the low end of the international income distribution.[24]

43. Extreme weather events such as tropical storms, together with sea-level rise, will increase the risk of damage to coastal infrastructure and productive assets. Saltwater intrusion may not only damage arable land but also threaten water supplies. The degradation of coastal ecosystems owing to climate change, such as wetlands, beaches and barrier islands, removes the natural defences of coastal communities against extreme water levels during storms. One quarter of Africa's population is located in resource-rich coastal zones and a high proportion of gross domestic product is exposed to climate-influenced coastal risks.[25]

44. In small island developing States, sea-level rise is expected to exacerbate inundation, storm surge, erosion and other coastal hazards, threatening vital infrastructure, settlements and facilities that support the livelihoods of island communities.[26] In the Caribbean and Pacific islands, more than 50 per cent of the population lives within 1.5 km of the shore. Almost without exception, international airports, roads and capital cities in the small islands of the Indian and Pacific Oceans and the Caribbean are sited along the coast, or on tiny coral islands.[27]

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[20] *World Population Prospects: the 2004 Revision* (United Nations publication, Sales No. E.05.XIII.6); and *World Urbanization Prospects: the 2005 Revision*, Department of Economic and Social Affairs Population Division, Working Paper No. ESA/P/WP/200 (2005).

[21] IPCC Fourth Assessment Report, Synthesis Report, sect. 3.3.1.

[22] *World Urbanization Prospects: the 2005 Revision*, see note 20 above.

[23] Contribution of Working Group II to the IPCC Fourth Assessment Report, chap. 7, sect. 7.1.4.

[24] S. Dasgupta and others, "Sea-level rise and storm surges: a comparative analysis of impacts in developing countries", World Bank Policy Research Working Paper 4901, April 2009.

[25] Contribution of Working Group II to the IPCC Fourth Assessment Report, chap. 6, sect. 6.4.2.

[26] IPCC Fourth Assessment Report, Synthesis Report, sect. 3.3.2.

[27] Contribution of Working Group II to the IPCC Fourth Assessment Report, chap. 16, executive summary.

IV. Threats to economic development

45. Several submissions highlighted that climate change can cause a number of economic disruptions, negatively impacting growth, eroding the revenue base of Governments and undermining governance capacities. It may negatively affect an economy's output, as with crop losses from drought or flooding. Through its effects on nutrition and health, it may diminish human and animal productivity. It may also contribute to land degradation and cause damage to other natural capital — for example, in coastal areas — and man-made infrastructure such as roads, ports, power grids, and so forth, diminishing an economy's productive potential.

46. Economies that are most heavily dependent on their primary sectors — notably agriculture, fisheries and forests — and those tropical countries which depend heavily on tourism, notably the small-island developing States, are most exposed to negative economic impacts.

47. Larger, more developed and diversified economies are better able to absorb climate impacts because the economic output of sectors and locations with low levels of vulnerability to climate change greatly exceeds that of sectors and locations with high levels of vulnerability.[28] The same is not true of smaller, less diversified economies, where a larger share of the economy may be vulnerable to climate impacts. [28]

48. For developing countries relying on a limited number of primary products at risk from climate impacts — for example, single crop agriculture and fisheries, declining productivity of those sectors will have an adverse impact on growth prospects. [28] One study suggests, for example, that a temperature increase of 2 °C could render much of Uganda's Robusta coffee-growing area unsuitable for coffee cultivation.[29]

49. Sea-level rise, increased risk of extreme weather events and damage to coral reefs and other coastal ecosystems will have an adverse effect on tourism and fisheries, on which many small-island developing States and other developing countries depend economically.[30]

50. The impacts of climate change on international trade remain speculative but could be significant. Rising sea-levels could require heavy investment in flood defences around ports and major industrial installations located near such deep-water ports may need to be relocated inland. Stronger winds, storm surges and rainfall point to the need for sturdier ships and offshore oil and gas installations.[31] All these factors are likely to raise transport costs. On the other side, the melting of Arctic ice and the opening of hitherto non-navigable sea lands could lower those costs for high-latitude countries.

51. For those developing countries whose economies depend heavily on natural capital adversely impacted by climate change, government finances would likely be

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[28] Ibid., chap. 7, sect. 7.4.1.

[29] O. Simonett, "Potential impacts of global warming", Global Resource Information Database (GRID)-Geneva, case studies on climatic change, Geneva, 1989.

[30] Where climate-related risks are still insurable, the costs of such insurance will rise and, for high-risk environments, insurance may no longer be available in future. In developing countries, it us not available even today for many economic activities at risk.

[31] *The Stern Report*, note 2 above, box 5.7.

diminished. In extreme cases, this could undermine institutional capacities and the provision of core public services. As several submissions have pointed out, in the case of countries characterized by fragile States and internal tensions, increased climate-induced environmental stress could overstretch existing coping strategies and, in combination with a number of political, economic, and societal factors, could result in: (a) growing tensions over increasingly scarce natural resources; (b) decreased State authority and increased risk of domestic strife;[6] and (c) political instability and radicalization.

52. Areas for further research include the degree of exposure of different economies to climate change damages, the dependence of States on revenues gained from climate-sensitive natural resources (agriculture, fisheries, forestry), and the determinants of an economy's capacity to diversify.[11]

V. Threats from uncoordinated coping

53. Much of the concern for the security implications of climate change relates to the possible consequences of large-scale and/or rapid disruptions to economies, societies and ecosystems. In that event, adaptive capacities of individuals, communities and even nation States may be severely challenged if not overwhelmed. In that event, uncoordinated coping and survival strategies may come to prevail, including migration and competition for resources, possibly increasing the risks of conflict. As the research shows and submissions acknowledge, it is not possible to say with a high degree of confidence whether and when climate impacts might induce large-scale involuntary migration and/or violent conflict. It depends on many complex local conditioning factors.

A. Population displacement and involuntary migration

54. For millennia, migration has been a human adaptive strategy in the face of poverty, resource scarcity, ethnic or religious tensions, violent conflict or other push factors. Local environmental change is another push factor. Although economic and political factors are the dominant drivers of displacement and migration today, climate change is already having a detectable impact.[32] The scale of migration and displacement, both internal and cross-border, is expected to rise with climate change, as is the proportion of population movements considered "involuntary". However, estimates of the number of people who may become migrants as a result of climate change cover a wide range and are highly uncertain.[33] Forecasts of the number of persons that may have to migrate owing to climate change and environmental degradation by 2050 vary between 50 million and 350 million.[34]

55. In the foreseeable future, the majority of those displaced by the effects of climate change, whether as the result of sudden-onset hydro-meteorological

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[32] K. Warner and others, *In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement*, May 2009, report for the United Nations University Institute for Environmental and Human Security, CARE, Center for International Earth Science Information Network of Columbia University, UNHCR and the World Bank.

[33] Contribution of Working Group II to the IPCC Fourth Assessment Report, box 7.2.

[34] International Organization for Migration, *Policy Brief*, "Migration, climate change and the environment" (May 2009).

disasters or environmental degradation, are likely to remain within the borders of their country of origin. However, some displacement will also take place across internationally recognized national borders.[35]

56. The bulk of climate change-related human displacement and migration, especially that resulting from loss of arable land and/or water, will add to the number of urban dwellers in developing countries. The challenges to urban adaptation are, therefore, likely to increase substantially as are, if left unattended, the vulnerabilities of poor urban residents.

57. As noted in several submissions, in the case of small island developing States, the adverse impacts of climate change are already increasing the rate of domestic migration and relocation, with people from rural areas and outlying islands moving to urban centres as they lose their livelihoods and lands owing to natural disasters and sea-level rise. This migration is placing enormous strains on food, housing, education, health, and water supplies, as recipient communities struggle to accommodate the number of people migrating. Recent examples of internal relocation include the settlement of Lateau, in the northern province of Torba in Vanuatu, which had to be relocated because of rising sea levels. Further relocations have happened in the Federated States of Micronesia, Papua New Guinea, Tuvalu and the Solomon Islands.

58. The future prospect of large-scale climate-related migration and displacement, however uncertain, raises the issue of how those affected are to be treated under international humanitarian law. Presently, no internationally accepted term or legal framework exists for people who migrate voluntarily or are forced to move for environmental reasons. Although terms such as "environmental refugee" or "climate change refugee" are commonly used, they have no legal basis.

59. Arguably, article 33 (1) of the 1951 Convention relating to the Status of Refugees prohibits a State from forcing people who move owing to environmental factors to return to their original State, or denying them entry at the border, if their life would be threatened as a consequence. However, this principle of international law does not provide for an indefinite right to stay in the admitting State. Thus a new and climate-focused legal framework would be necessary to protect persons displaced by climate change, especially when there may be no home territory to which to return, as with submerged island States (see box III).

60. Displaced persons who remain within their own country qualify as "internally displaced persons", and the 1998 United Nations Guiding Principles on Internal Displacement (Guiding Principles) provide the normative framework for addressing protection challenges in situations of internal displacement. The Guiding Principles define "internally displaced persons" as "persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of natural or human-made disasters, and who have not crossed an internationally recognized State border".

[35] Office of the United Nations High Commissioner for Refugees, "Forced displacement in the context of climate change: challenges for states under international law", paper submitted to the Ad Hoc Working Group on Long-Term Cooperative Action under the United Nations Framework Convention on Climate Change, 2009.

61. There are many cases of mass population movements owing to climate variability, particularly in Africa (Sahel, Ethiopia) but also in South America (Argentina, Brazil), and in the Middle East (Syrian Arab Republic, Islamic Republic of Iran). One recent study analysing 38 cases since the 1930s in which environmental factors played a role in mass migration and displacement concludes that 19 of them resulted in some form of conflict.[36] The study states that environmental factors that "push" people to migrate include degradation of arable land, droughts, deforestation, water scarcity, floods, storms and famines. The study also acknowledges that the environmental factors do not work in isolation, but can contribute to a pre-existing migration flow. Conflict may arise when migrants, particularly those of a different nationality or ethnicity, move quickly or in large numbers into neighbouring States that are either already suffering from conflict or have limited resources and coping mechanisms. Tension can also mount when an influx of migrants contributes to alterations in habitat and resource availability in receiving areas and when grievances of environmentally vulnerable communities in those areas go unanswered.[37] Property claim disputes and increased demands on limited publicly funded health and social systems can also generate frictions.

62. A study of civil wars between 1945-2005 finds that, of 103 ethnic conflicts, 32 involved violence between members of a regional ethnic (minority) group that considers itself to be the indigenous "sons-of-the-soil" and recent migrants from other parts of the country.[38] While the motives of these migrations are various, the negative dynamic between migrants and indigenous groups raises concerns in the event of intensified climate-induced migration.

63. Societies differ greatly in their capacity to manage population movements and assimilate migrants, and a capacity adequate to manage moderate and/or gradual flows may be overwhelmed by massive and/or sudden flows. Adequately planning for and managing environmentally induced migration will be critical.[37] For sending communities, the loss of human capital that can accompany such outward migration may leave them unable to maintain basic social services and productive activities. These constraints can in turn lead to further migration pressures.[37]

B. Threat of intra-State conflict

64. The empirical evidence on the relationship between climate change and conflict remains sparse and largely anecdotal. This is beginning to change, as researchers link climate models and conflict models. Still, modelling climate change accurately at a fine-grained geographic scale remains a major challenge. Likewise with conflict, even with improved models and data, it remains very difficult to predict conflict occurrences and events.

65. As climate change is expected to affect rainfall variability, water resource availability, land degradation and land availability, studies often look for historical evidence of a significant link between these and different types of conflict or violence — including inter-State conflict and violence within borders of different

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[36] R. Reuveny, "Climate change-induced migration and violent conflict", in *Political Geography*, see note 11 above.

[37] International Organization for Migration, Discussion note: Migration and the Environment (MC/INF/288), November 2007.

[38] J. D. Fearon and D. D. Laitin, "Sons of the soil, migrants and Civil War", Stanford University.

kinds: one-sided violence, intra-State violence between groups, and unorganized violence.[39] A variety of local socio-economic, environmental and political factors, including adaptive capabilities, condition the results.

66. One recent empirical study of climate change and conflict using geo-referenced data finds that water and land scarcity are only weak predictors while high population density is a consistently strong predictor of armed conflict. Also, the interaction between population growth and water scarcity proves to be significant.[40] Still, political instability and other factors appear to be more important predictors of conflict.

67. That said, the fact that quantitative studies fail to confirm statistically significant links between environmental factors and conflict does not mean they do not exist. Rather, environmental factors may exacerbate conflict dynamics and risk through multiple and indirect pathways, interacting in complex ways with social, political, and economic factors, which tend to be more direct and proximate drivers of armed conflict.

68. A recent United Nations Environment Programme (UNEP) study[41] highlights that the potential consequences of climate change for water availability, food security, prevalence of disease, coastal boundaries, and population distribution may aggravate existing tensions and generate new conflicts.[42]

Box I

Climate change and security in Africa

Africa will be hard hit by climate change. Projected climatic changes for Africa suggest a future of increasingly scarce water, falling agricultural yields, encroaching desert and damaged coastal infrastructure. The continent, with the largest share of least developed countries, is less endowed than other regions with the adaptive capacities — technology, institutions, and financial resources — to buffer and cope with climate impacts.

Africa is often seen as a continent where climate change could potentially intensify or trigger conflict. Among the reasons given are the continent's reliance on climate-dependent sectors (such as rain-fed agriculture), recent ethnic and political conflict, and fragile States. Africa is also undergoing extremely rapid urbanization and population growth — already home to 14 per cent of the world's human population, a figure that is projected to rise to 25 per cent by 2050.

The continent is entering a demographic transition, with a large share of young persons in the population. In other regions, for example, Asia, this transition has helped to drive the process of economic growth

[39] Special issue of *Political Geography*, vol. 26, No. 6 (2007), on climate change and conflict contains a number of important empirical contributions.

[40] C. Raleigh, H. Urdal, "Climate change, environmental degradation and armed conflict", in *Political Geography*, see note 11 above.

[41] UNEP, *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment* (Nairobi, 2009), *Executive summary*, p. 5.

[42] UNEP, *Sudan: Post-Conflict Environmental Assessment* (Nairobi, 2007).

and industrialization. For that to happen, millions of jobs will need to be created each year for the rapidly growing ranks of urban youth. Will Africa follow this path, or will these rapid changes, combined with climate shocks, provide more fertile ground for insecurity and conflict?

69. More than one sixth of the world's population currently lives in areas that rely for their freshwater supplies on glacier and snow melt-water from major mountain ranges (for example, Hindu-Kush, Himalaya, Andes).[43] As explained above, climate change is projected to affect negatively water availability in those areas over the twenty-first century. In the Andean region, for instance, there is concern that the decline of freshwater supply brought about by melting glaciers may spark tension and social unrest, based on what has happened in the past.

Box II

Melting of the Himalayan glaciers

The Himalayas, called the "Water Tower of Asia", have the largest concentration of glaciers outside the polar caps. The glacier-fed rivers originating from the Himalaya mountain ranges surrounding the Tibetan Plateau comprise the largest river run-off from any single location in the world.[44] The rivers that drain these mountains move through some of the most populous areas in the world. In the year 2000, the river basins of the Indus, Ganges, Brahmaputra, Irrawaddy, Salween, Mekong, Yangtze, and Huang He (Yellow) Rivers collectively supported a population of 1.4 billion people, or almost a quarter of the world's population.

Himalayan glaciers are already in retreat.[45] Their dependence on glacier run-off makes downstream populations particularly vulnerable to the consequences. The Indus River valley supports one of the largest irrigation works in the world. Approximately 90 per cent of Pakistan's crop production is grown under irrigation, and all of the water comes from barrages along the Indus. The Ganges, Yangtze, and Yellow Rivers also have large areas under irrigation.

It is suggested that the accelerated melting of glaciers will cause an increase in river levels over the next few decades, initially leading to higher incidence of flooding and land-slides.[46] But, in the longer-term, as the volume of ice available for melting diminishes, a reduction in glacial run-off and river flows can be expected.[47] In the Ganges, the loss of glacier melt-water would reduce July-September flows by two thirds,

[43] IPCC Fourth Assessment Report, Synthesis Report, sect. 3.3.1.

[44] UNEP-GRID Arendal Map Gallery. Available at http://maps.grida.no/go/graphic/water-towers-of-asia-glaciers-water-and-population-in-thegreater-himalayas-hindu-kush-tien-shan-tib.

[45] N. Kehrwald and others, "Mass loss on Himalayan glacier endangers water resources", *Geophysical Research Letters*, vol. 35, No. 22, 2008.

[46] IPCC, *Climate Change 2001: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Third Assessment Report*.

[47] Z. Wanchang and others, "A monthly stream flow model for estimating the potential changes of river runoff on the projected global warming", *Hydrological Processes*, vol. 14, No. 10 (2000).

causing water shortages for 500 million people and 37 per cent of India's irrigated land.[48] Should flow reductions become acute, the potential for mass migration out of irrigated areas could be significant.[49]

70. One major study[50] identifies three regions in which increased migration induced by climate change could pose the risk of heightened tensions and conflict: South Asia (in particular low-lying and densely populated Bangladesh), sub-Saharan Africa (in particular Nigeria, where migration may lead to exacerbation of the conflict in the Niger delta, and East Africa, where migration would take place in a context of weak and failing states and a range of unresolved political issues) and Europe (with respect to an expected upsurge in immigrants from other regions, exacerbating existing tensions).

VI. Threat of loss of territory and statelessness

71. In the case of some small island developing States, sea-level rise presents perhaps the ultimate security threat, jeopardizing the very existence of small low-lying countries such as the Maldives, where 80 per cent of land is less than one metre above sea level[51] and could therefore disappear over the next 30 years. In 2005, Papua New Guinea's Carteret Islands reportedly became the first low-lying islands to evacuate their population because of climate change, resettling 2,600 islanders to the larger Bougainville Island.[34] The Carterets are among the hardest hit islands in the Pacific and may be completely submerged by as early as 2015. Given the particular vulnerability of Pacific small island developing States, a single extreme weather event can suddenly exceed a nation's capacity to respond, rendering whole islands, particularly low-lying atolls, uninhabitable.[52] Many island States face the prospect of loss of significant amounts of territory to sea-level rise and inundation, and some face the prospect of complete submersion, with the resultant threat of statelessness of their populations.

72. In view of the fact that statelessness has not yet arisen, however, the international law principle of prevention of statelessness would be applicable and the threats implied by mass statelessness for the concerned populations could be minimized. Multilateral comprehensive agreements would be the ideal preventive mechanism, providing where, and on what legal basis, affected populations would be permitted to move elsewhere, as well as their status.[53]

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[48] WWF Nepal Programme, "An Overview of Glaciers, Glacier Retreat, and Subsequent Impacts in Nepal, India and China", 2005.

[49] Asia: Glacier melt and irrigated agricultural systems, in *In Search of Shelter*, note above, sect. 3.1.

[50] K. Campbell and others, The Age of Consequences: The Foreign Policy and National Security Implications of Global Climate Change (Washington, D.C., Center for Strategic and International Studies, 2007), chap. III.

[51] UNEP, "Atlantic and Indian Oceans Environment Outlook" (2005).

[52] Contribution of WGII to the IPCC Fourth Assessment Report, executive summary.

[53] Office of the United Nations High Commissioner for Refugees, supported by IOM and the Norwegian Refugee Council, "Climate change and statelessness: an overview", note submitted to the Ad Hoc Working Group on Long-Term Cooperative Action under the United Nations Framework Convention on Climate Change, 2009.

Box III

Small island developing States and international legal issues regarding statelessness

Islands becoming uninhabitable or disappearing as a result of sea-level rise raise the issue of the legal status of the citizens and legal rights of these States, including over fisheries.

With the disappearance of territory, one of the key constituting elements of statehood, it is not clear that these States would continue to exist as such. The same would apply if the territory would be uninhabitable to such an extent that the entire population and the Government would be forced to relocate to other States. In the event that statehood is deemed to have ceased in such a scenario, the populations concerned would be left stateless unless they acquired other nationalities. Even where the States continued to exist in legal terms and their Governments attempted to function from the territory of other States, it is unclear that they would be able to ensure the rights which flow from citizenship.

Legal and political arrangements may be necessary for the protection of affected populations. One option is the acquisition of land within another State, by purchase or a treaty of cession. There is precedence for such an option: in the late nineteenth century, many Icelanders left Iceland for environmental and social reasons. They entered into an agreement with the Canadian Government and were given land in which they could form a provisional Government, and were given both Canadian and Icelandic citizenship. Eventually, the settlement was fully integrated into Canada. This example shows that there are international mechanisms by which stateless migrants can be protected and accommodated.

73. Climate change poses a fundamental threat to cultural survival for those societies whose territories and ways of life are threatened by sea-level rise and inundation, as noted by small island developing States. Some Member States have noted that other cultures, for example, those of indigenous peoples, may be at risk from destruction or radical alteration of ecosystems and habitat by climate change. Such peoples may also face challenges in using migration as a coping strategy as a result of discrimination in receiving locations.[54] Thus the impacts of climate change on vulnerable societies will need to be addressed not only as an issue of sovereignty and statelessness but also as a threat to cultural identity.[54]

[54] M. Macchi and others, "Indigenous and Traditional Peoples and Climate Change", IUCN Issues Paper, March 2008.

VII. Threats to international cooperation in managing shared resources

74. Climate change has potential for affecting international relations among countries through possible conflicts of interest over the use of transboundary water or other resources that become increasingly scarce as a result of climate change. The need to share common waters has historically tended to foster cooperation among States, even those which may be historical rivals (e.g., South Asian countries sharing major river basins such as the Indus, Ganges and Brahmaputra, and African countries sharing the Nile and Zambezi). There is thus some basis for optimism that inter-State cooperation could be reinforced by the challenges posed by climate change, but there is also concern that intensified scarcity could impose heavy strains on such cooperation.[55]

Box IV
The Indus Waters Treaty

A water-sharing treaty of the Indus System of Rivers was signed between India and Pakistan in 1960. The treaty has survived two major wars between the rivals and governed the sharing of a strategic river.[56]

Today, both countries are plagued by water stress — strained by demand from booming populations — and there is increased competition for the Indus' dwindling resources. While the major river basins in South Asia are all vulnerable to the unpredictable effects of climate change, the Indus' flow is uniquely dependent on the seasonal runoff from shrinking Himalayan glaciers. This poses new challenges for cooperation under the Indus Treaty, and efforts will be needed at all levels to ensure its continued effectiveness.[57]

75. Rising sea levels and submersion of large areas will result in the loss of territory, including the loss of entire low-lying islands leading to forced population relocation, possible statelessness (see box IV above), and disputes over territory that have to be dealt with within the realm of international law. This could impact current disputes over maritime sovereignty, such as in the South China Sea, and could create new ones.

76. Rapidly receding Arctic sea ice could enable access to previously inaccessible natural resource deposits and maritime transport routes.

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[55] S. Hazarika, "South Asia: sharing the giants — water sharing of Indus, Ganges and Brahmaputra Rivers", *UNESCO Courier* (October 2001).

[56] W. Wheeler, "The Water's Edge", *GOOD Magazine* (July 2009).

[57] W. Wheeler and A.-K. Gravgaard, "South Asia's troubled waters", dispatches from the Pulitzer Center on Crisis Reporting, 2009.

Box V

Legal and security implications of melting Arctic sea ice

The rapid melting of the Arctic sea ice may create new challenges for the health and security of Arctic ecosystems and indigenous peoples. It has stimulated interest in exploiting the potentially significant oil and gas resources that may become accessible, as well as in opportunities presented by the opening of new shipping routes. There are potentially overlapping claims to economic rights over certain areas of the Arctic seabed. The United Nations Convention on the Law of the Sea provides the legal framework for the establishment of maritime zones, including the delineation of the outer limits of the continental shelves of coastal States, where those shelves extend beyond 200 nautical miles.

There are presently some unresolved disputes among a number of Arctic States as to the legal status of certain shipping routes. The current legal framework is well developed and nearly universally adhered to and recognized. The Arctic States are also Member States to the Arctic Council, which provides a forum for discussion and fosters the process and spirit of cooperation. Cooperation could be further strengthened.

VIII. Preventing and responding to emerging threats

77. If climate change acts as a threat multiplier, then what are the threat minimizers? Broadly speaking, there are five which emerge from the submissions: effective international and national mitigation actions, supported by finance and technology flows from developed to developing countries; strong support to adaptation and related capacity-building in developing countries; inclusive economic growth and sustainable development, which will be critical to building resilience and adaptive capacity; effective governance mechanisms and institutions; and timely information for decision-making and risk management. International cooperation will also need to be reinforced to address transboundary effects and to prevent and resolve climate-related conflicts in accordance with the Charter of the United Nations. Most submissions highlight the central role of sustainable development in enhancing adaptive capacity and as the overarching framework to address existing vulnerabilities that may be exacerbated by climate change.

A. Mitigation

78. IPCC finds that achieving greenhouse gas stabilization levels associated with holding the global mean temperature increase below 2-2.4°C will require that emissions peak by 2015 and decline steeply thereafter, with a decline in emissions relative to 2000 levels of 50-85 per cent by 2050.[58] Some of the most vulnerable countries have criticized a 2°C target as not ambitious enough. They are already

[58] New science suggests that a percentage reduction at the lower end of the range is very unlikely to keep temperature rise below 2° C.

suffering the effects of sea-level rise owing to the present temperature increase and are likely to lose some of their territories under a 2°C scenario. Clearly, stringent emission reductions are required to keep temperature increases as low as possible. This will require much greater levels of ambition than are currently evident from the sum total of national actions.

79. It is critical that Member States take action to address climate change in ways that bolster security and strengthen the multilateral system. First and foremost, this requires reaching a comprehensive, fair and effective deal in Copenhagen that will help to stabilize our climate; catalyse the transformation to clean energy, lower-emissions economies; protect development gains; assist vulnerable communities in adapting to climate impacts; and build more secure, sustainable and equitable societies. Failure to deliver progress on what is now widely perceived as the defining challenge of our age may risk undermining confidence in the multilateral system more broadly.

80. Mitigation on the scale needed will require, inter alia, moving swiftly towards low-carbon energy sources, as well as major advances in energy efficiency and conservation, and a dramatic slowing in deforestation rates. All this must be achieved while ensuring that the many millions of poor people currently without access to modern energy services are able to afford access to them. Several Member States have emphasized that technology transfer and financial assistance from developed countries are vital to enable developing countries to move swiftly towards low-carbon development.

B. Adaptation

81. Adaptation involves making people secure and safeguarding social and economic development in the face of climate change threats. Key elements include food security, health and safety. Adaptation requires empowering people, building their resilience, securing livelihoods, and putting in place or strengthening the physical infrastructure to protect against extreme weather events as well as the institutions and systems needed to cope with their consequences. Effective adaptation will require not only effective local action but also national coordination, supported by vigorous international cooperation and, in the case of vulnerable developing countries, by adequate resources from developed countries.

82. Critical actions to enhance food security in vulnerable environments include: developing new drought- and heat-tolerant crop varieties; conserving and better managing scarce water resources; combating land degradation and soil erosion; reducing the loss of biodiversity and ecosystem services.[59] Promoting sustainable agricultural practices that sequester carbon in the soil is particularly promising because it simultaneously mitigates climate change while increasing agroecosystems' resilience and protection against extreme weather events and declines in farm productivity. Because poor farmers in the tropics will be disproportionately affected by climate change, low-cost and effective practices that sequester soil carbon can also contribute to food security and poverty alleviation.

[59] FAO, "Climate change and adaptation and mitigation in the food and agricultural sector", technical background document for the expert consultation held from 5-7 March 2008 of the High-Level Conference on World Food Security: the Challenges of Climate Change and Bioenergy, p. 4.

83. The actual impact of climate change on human health and well-being will depend critically on the performance of public health systems and other supporting infrastructure, especially in developing countries. Improved climate-sensitive disease surveillance is critical to measure, evaluate, anticipate and respond to the effects of climate on health.[60] Public awareness, the effective use of local resources, adequate funding, appropriate governance arrangements and community participation are necessary to mobilize and prepare for impacts of climate change on public health systems.[61]

84. Tackling the threat of climate change in risk-prone areas will need a strengthening of disaster risk management, risk reduction and preparedness. Policies outlined in the Hyogo Framework[62] address issues related to disaster risk reduction, which are relevant in the adaptation context. Given the high exposure of coastal areas to climate risks, integrated coastal and marine resource management is a valuable approach to building resilience and strengthening natural defences against storm surges. Regional and international insurance or financing facilities to help countries hit by natural disasters are relatively new[63] and their further development warrants consideration.

C. Economic growth and sustainable development

85. Sustaining economic growth is essential to strengthening resilience and ensuring that developing countries and their people are adequately equipped to adapt to climate change. Broad-based economic growth also tends to foster social cohesion and limit risks of social conflict. Any serious compromise of national or subnational growth prospects from climate change could, in some situations, increase risks of social discord and conflict. Therefore, many Member States place great importance on "climate-proofing" economic development, to minimize the chances that climate change will interfere with economic progress and the attainment of the internationally agreed development goals as well as the maintenance of social and political stability.

86. Several submissions highlight the importance of integrated climate change policymaking that cuts across economy, society and the environment and across all sectors, and the mainstreaming of climate change into economic development and sustainable development plans and policies and poverty reduction strategies, ensuring that climate change considerations are built right into the foundations of plans to reach the Millennium Development Goals.

87. For some countries, in particular low-lying atolls, inundation and the loss of land from sea-level rise pose a potential threat to the continued existence of the States themselves. The potentially affected Member States have put forward the

[60] IPCC Fourth Assessment Report, Synthesis Report, table 4.1; and K. L. Ebi (2008), "Public Health Adaptation to Climate Change in Low-Income Countries", presentation at Brookings Institution Conference, Washington, D.C.

[61] Contribution of Working Group II to the IPCC Fourth Assessment Report, chap. 8, sect. 8.6.

[62] Hyogo Framework for Action 2005-2010: Building the Resilience of Nations and Communities to Disasters, adopted at the World Conference on Disaster Reduction, Kobe, Japan, 18-22 January 2005.

[63] The African, Caribbean and Pacific States-European Union Natural Disaster Facility and Caribbean Catastrophe Risk Insurance Facility are two such initiatives.

view that, for them, no amount of sustainable development can protect against the security implications of climate change and that development itself becomes meaningless when there is no longer any sovereign territory with which it can be associated.

D. Effective governance mechanisms and institutions

88. Factors such as governance and effective institutions at the local, national, regional and international levels are crucial in lessening any possible security risks posed by climate change.

89. Governments, in cooperation with civil society, need to ensure — and build if necessary — the capacity to lead and execute an effective and coordinated national climate change strategy. Should climate change increase resource scarcities, cause localized food shortages, and/or intensify natural disasters, this could stretch existing State capacities in many countries. Thus, many developing countries would stand to benefit from a comprehensive programme of institutional capacity-building for climate change adaptation, including institutions for prevention, mediation and the peaceful resolution of conflicts. In the absence of such institutional strengthening, and in the event of failure by Governments to respond effectively to their people's needs in the face of climate-related disasters, political legitimacy could be undermined.

90. Adaptive capacity needs to extend across all levels of government and all sectors of society. Addressing the impacts of climate change will require broad public engagement. As those impacts disproportionally affect the most vulnerable and marginalized groups in societies, it is imperative that these groups are empowered and involved in all stages of planning, decision-making and implementation of measures to tackle climate change.

E. Information for decision-making and risk management

91. Improved data and information on climate change and its impacts at the local and regional levels are needed for sound and informed decision-making on response and adaptation measures. While the scientific findings of the IPCC Fourth Assessment Report provide useful information at the global and regional level, they tend to lack the resolution and specificity required for detailed analysis and decision-making at the country or lower level. In this regard, several Member States suggest, in the context of future climate change negotiations, the establishment of a work programme to support the implementation of national adaptation programmes of action that would address research and systematic observation needs.

92. Enhanced earth observation and climate monitoring systems are essential, and there is an urgent need to make the information they produce available to decision makers in developing countries. It is important to strengthen the relevant observation networks such as the Global Climate Observing System and the ongoing work on the development of the Global Earth Observation System of Systems.

93. Technical cooperation and assistance is required to strengthen meteorological services and early warning systems, which can serve as a useful tool to help countries to respond to extreme weather events and minimize damages and loss of

human life. Integrating the hard science of climate change with local knowledge is necessary in order to provide those who are the most vulnerable with the tools needed to respond and adapt. Affordable information and communications technologies can be an effective means of getting timely information to people facing climate-related risks at the local level.

94. Finally, increased support for research and analysis on the security implications of climate change is needed, especially through stronger linkages between physical and social models.

F. Reinforcing international cooperation

95. Safely managing the multiple transboundary effects of climate change will require multilateral approaches. These will include adherence to and observance of existing frameworks, and new modes and frameworks for international cooperation as necessary. A number of areas that could require multilateral responses have been highlighted above, including the question of: migrants from climate-related causes; statelessness, including issues such as displaced persons and States' rights over maritime zones; reinforcing cooperative mechanisms to deal with changed international resource availability, as with the management of transboundary waters and of Arctic resources.

96. Experience shows, as noted above, that natural resource scarcity can foster international cooperation, and I urge Member States to look at cooperative approaches as the only way of safely managing the transboundary effects of climate change.

97. Should tensions emerge in connection with the effects of climate change — regarding, for example, water and land issues — preventive diplomacy and mediation are likely to be critical for managing the issues and fostering peaceful outcomes. Member States, regional organizations and the United Nations will have a key role in addressing dialogue and mediation needs, and supporting those efforts.

IX. The way forward

98. The international community has a number of vital roles to play to bolster security in the face of climate change. First, it must take bold action on climate change mitigation, for without slowing the rate of climate change, the threats to human well-being and security will greatly intensify. The importance to the future of the planet of forceful mitigation action cannot be overstated.

99. Secondly, the international community must provide stronger support to climate change adaptation in developing countries, including through investments in capacity-building at all levels. As the impacts of climate change range over many sectors, the support to adaptation needs to be correspondingly broad. It needs to address: water scarcity, food security and agricultural resilience; the functioning of public health systems to deal with increased disease incidence and risk; disaster prevention, preparedness and response; early warning systems at both the national and regional levels for various climate change impacts. Where national capacities are overstretched by devastating cyclones, floods, droughts or other hazard events, there will be an increasing requirement of the international community to respond.

100. Thirdly, the international community needs to redouble its efforts to ensure the sustainable and equitable development of all countries, notably through developed countries' meeting their international commitments on development assistance. This is all the more imperative in the midst of the current global economic difficulties, which have threatened to set back the development progress of recent years in many developing countries. Continued economic growth is important to minimizing vulnerabilities to climate change. As the present report has repeatedly stressed, poor countries are among the most vulnerable, and the best way to reduce their vulnerability is to help to lift them out of poverty. Moreover, developing countries will need firm international financial and technological support to facilitate their development along a low-carbon path.

101. Fourthly, the international community must anticipate and prepare itself to address a number of largely unprecedented challenges posed by climate change for which the existing mechanisms may prove inadequate:

- One is the possibility of large numbers of persons displaced across borders by climate change, which existing international law cannot adequately address, especially if they have no country to which to return.
- A second is the prospect of "statelessness" of citizens of submerged island nations, which raises important legal issues concerning national sovereignty, claims over marine resources, and the rights and relocation of citizens of such territories. Legal and political arrangements may be necessary for the protection of affected populations.
- A third is the prospect of the drastic reduction in water availability to hundreds of millions of the world's people as a result of the melting of mountain glaciers and snow pack. How can neighbouring countries dependent on the same water sources sustain and even strengthen their cooperative management of shared waters in the face of these challenges, and what support can the international community provide?
- Finally, there is the prospect of intensified competition over newly accessible Arctic natural resources and trade routes. An institutional framework exists that could be strengthened, or new cooperative arrangements forged.

102. Climate change is a global challenge that can only be tackled at a global level. Several submissions of Member States stress that there is an opportunity to increase policy coherence and cooperation across the United Nations system, as well as with other relevant organizations. The efforts to mainstream climate change within United Nations activities must continue and be strengthened. There is a need to improve the flow of information and sharing of assessments, particularly on early warning, between different regional and international organizations. The United Nations system may also need to review further and enhance its capacity to respond to an anticipated growth in disasters and humanitarian crises related to climate change.

103. All the submissions agree that the United Nations Framework Convention on Climate Change remains the central United Nations body responsible for conducting climate change negotiations. Beyond that, Member States express a variety of views on institutional questions, which can be found in their submissions on the website of the Department of Economic and Social Affairs Division for Sustainable Development (http://www.un.org/esa/dsd/resources/res_docugaecos_64.shtml).

104. A number of submissions highlight the need for further research to shed clearer light on causal pathways and conditioning factors that may help to explain why, in different situations, broadly similar physical impacts of climate change may have very different implications for human well-being and security. How likely are climate change impacts, in a given context, to give rise to migration pressures, to increase social tensions and the risk of violent conflict, and to weaken the capacities of States and other institutions? What preventive measures can be taken by national Governments and civil society to minimize the threats posed by climate change to human well-being, development and security? Finally, how can the international community best prepare itself for possible emerging challenges such as large-scale population displacement, statelessness, and strains on cooperative arrangements for the management of international resources?

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The situation in the Middle East

Question of Palestine

Security Council
Sixty-fourth year

Peaceful settlement of the question of Palestine

Report of the Secretary-General

Summary

The present report is submitted in accordance with General Assembly resolution 63/29. It contains replies received from the President of the Security Council and the parties concerned to the notes verbales sent by the Secretary-General pursuant to the request contained in paragraph 21 of the resolution. The report also contains the observations of the Secretary-General on the current state of the Israeli-Palestinian conflict and on international efforts to move the peace process forward with a view to achieving a peaceful settlement. The report covers the period from September 2008 to August 2009.

* A/64/150 and Corr.1.

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I. Introduction

1. The present report is submitted pursuant to General Assembly resolution 63/29.

2. On 1 July 2009, pursuant to the request contained in paragraph 21 of the above-mentioned resolution, I addressed the following letter to the President of the Security Council:

> "I have the honour to refer to resolution 63/29, which the General Assembly adopted on 26 November 2008, at its sixty-third session, under the agenda item 'Question of Palestine'.
>
> "In order to fulfil my reporting responsibilities under this resolution, I should be grateful if you would kindly convey to me the views of the Security Council by 31 July 2009."

3. On 24 July 2009 the following reply was received from the Security Council:

> "The goal of achieving a peaceful settlement of the question of Palestine remains one of the major challenges facing the international community, including the Security Council.
>
> "The Security Council considers the situation in Palestine each month under an agenda item on 'The situation in the Middle East, including the question of Palestine,' with general presentations in the form of briefings by either the Under-Secretary-General for Political Affairs or the United Nations Special Coordinator for the Middle East Peace Process, followed by an open meeting of the Council or by consultations among Council members.
>
> "On 22 July 2008, the Council convened an open debate on the situation in the Middle East, during which it heard a briefing by the Under-Secretary-General for Political Affairs, B. Lynn Pascoe, who indicated a number of encouraging developments across the region and stressed the importance of achieving further visible progress in peaceful negotiations, consolidating the ceasefire and resolving the humanitarian crisis in Gaza, and improving the livelihood of Palestinians in the Occupied Territories. Most representatives called upon the parties concerned to renounce violence, implement agreements, abide by their obligations under international law, particularly human rights and humanitarian law, and take further concrete action to advance the peace process towards its stated goals on the basis of United Nations resolutions, the principle of land for peace, the Arab Peace Initiative and the Annapolis Conference.
>
> "On 20 August 2008, the Council heard a briefing by the Under-Secretary-General for Political Affairs on the situation in the Middle East, including the Palestinian question, which was followed by consultations of the whole. The Under-Secretary-General informed the Council that Israeli-Palestinian negotiations as part of the Annapolis process were continuing, that the fragile ceasefire between Israel and Hamas had been largely respected, but that the situation on the ground remained a cause for concern, particularly the continuing settlement activity across the West Bank and in East Jerusalem, and the rise of internal Palestinian violence. The organization in September of a meeting of the Quartet, followed by an iftar with Arab partners, and a meeting

of the Ad Hoc Liaison Committee would provide occasions to take stock of the progress made and to assist in the implementation of donor pledges to address the impending Palestinian budget crisis.

"The Under-Secretary-General concluded by reaffirming the Secretary-General's commitment to a just and lasting comprehensive regional peace in the Middle East, based on Security Council resolutions. The meeting was followed by consultations of the whole.

"The Council examined this issue twice during the month of September 2008.

"On 18 September 2008, in consultations, the Special Coordinator for the Middle East Peace Process, Robert Serry, briefed the Council on the negotiations taking place between Israel and the Palestinian Authority, in particular the talks of 26 and 31 August and 16 September 2008. He also stated that relations between the Syrian Arab Republic and Lebanon were improving, while the blockade imposed by Israel in the Gaza Strip was still a concern.

"At the request of the Permanent Mission of Saudi Arabia to the United Nations on behalf of the Arab League, the Security Council held a debate on 26 September 2008, at the ministerial level. Although many delegations focused their statements on the settlements that were still going on in the Palestinian territories, others spoke about the global situation in the Middle East.

"On 22 October 2008, the Council heard a briefing on the Middle East from the Under-Secretary-General for Political Affairs. He told the Council, inter alia, that despite ongoing efforts by the parties concerned, the situation on the ground was not improving 'in the way that is required' to ensure a durable settlement. He also hoped that, notwithstanding the transition currently under way, the Israel-Palestinian negotiations would not only continue but would intensify until the end of the year, within the framework of the Annapolis process. During consultations of the whole, many members of the Council reaffirmed their support for the continuation of Israeli-Palestinian negotiations, and expressed the wish that the United Nations would, as appropriate, play a greater role in support of the peace process. Members of the Council also emphasized that the international community could not lose sight of the humanitarian situation on the ground.

"On 25 November 2008, the Council was briefed by the Under-Secretary-General for Political Affairs, B. Lynn Pascoe, on the situation in the Middle East, including the Palestinian question. He expressed regret that Israel and the Palestinians were likely to fall short of their commitment, made at Annapolis, to reach an agreement by the end of the year. At the same time, he welcomed the parties' affirmation that they had engaged in direct, sustained and intensive negotiations.

"After the briefing, owing to the sensitivity of the issue, the Council held consultations of the whole, during which members of the Council held an interactive dialogue with the Under-Secretary-General.

"On 3 December 2008, the Security Council held a debate to discuss the situation in connection with the Libyan ship which was heading to the Port of

Gaza carrying humanitarian supplies. Members of the Council made statements. The Council also heard statements by the Permanent Observer of Palestine and the Permanent Representative of Israel. The Council did not reach any specific conclusion.

"On 5 December 2008, the Council addressed events in Hebron in consultations of the whole. Following the consultations, the President of the Council informally conveyed to the press that the members of the Council welcomed Israel's evacuation of settlers, condemned the resulting settler violence, urged respect for the rule of law without discrimination or exception and encouraged Israel and the Palestinian Authority to continue their security cooperation in the Hebron Governorate.

"On 16 December 2008, the Security Council adopted resolution 1850 (2008) by 14 votes in favour, with 1 abstention. The adoption was preceded by a Council debate that included the ministerial participation of several members and was chaired by the Prime Minister of the Republic of Croatia, Ivo Sanader. The Secretary-General also addressed the Council. Reiterating the vision of the two-State solution while noting the importance of the 2002 Arab Peace Initiative and the Quartet's ongoing work, the Council, in resolution 1850 (2008), declared its support for the Annapolis process and the irreversibility of the negotiations. The Security Council supported the parties' agreed principles for the bilateral negotiations, called on both parties to fulfil their obligations under the Road Map and refrain from any steps that could undermine confidence or prejudice the outcome of negotiations, and called on all States and international organizations to contribute to an atmosphere conducive to negotiations and to assist the Palestinian Authority. It urged intensified diplomatic efforts to foster mutual recognition and peaceful coexistence in the region in the context of achieving a comprehensive, just and lasting peace in the Middle East, and welcomed the consideration of an international meeting in Moscow in 2009.

"On 18 December 2008, the Security Council held an open debate on the situation in the Middle East, including the Palestinian question. The Council heard a briefing by the Special Coordinator for the Middle East Peace Process, Robert Serry, on the situation in Gaza and the West Bank. He also addressed the situation in Lebanon and the dynamics between the Syrian Arab Republic and Israel. He said that the main objective in the coming year was to sustain the political process during a period of transition, emphasizing the importance of the adoption of resolution 1850 (2008). He appealed for the observance of basic humanitarian principles in Gaza and warned against the escalation of violence. The Security Council then heard statements by the Permanent Observer of Palestine and the Permanent Representative of Israel. Representatives of Brazil, Cuba, Qatar, Turkey, Japan, the Islamic Republic of Iran, Chile, Pakistan, the Bolivarian Republic of Venezuela, Morocco, Norway, Australia, Iceland and the Chairman of the Committee on the Exercise of the Inalienable Rights of the Palestinian People also addressed the Council.

"On 28 December 2008, after consultations of the whole that had begun the previous evening following the outbreak of violence in the Gaza Strip and southern Israel, the President of the Council read out a statement to the press, expressing serious concern at the escalation of the situation in Gaza, and

calling for an immediate halt to all violence, calling for all parties to address the serious humanitarian and economic needs in Gaza, and stressing the need for the restoration of calm in full, which would open the way for finding a political solution.

"On 31 December 2008, the Security Council held an emergency meeting on the situation in the Gaza Strip and southern Israel. The Secretary-General addressed the Council, expressing profound concern that the Security Council's call for an end to the violence had gone unheeded, emphasizing the suffering of the civilian population in Gaza and stating that all parties must fully uphold international humanitarian law. He stressed the need for decisive action and welcomed efforts by European and Arab leaders. The Permanent Observer of Palestine and the Permanent Representative of Israel also addressed the Council. Members of the Council made statements, followed by the representatives of Egypt and the Permanent Observer for the League of Arab States.

"On 3 January 2009, the Council held consultations of the whole on the situation in Gaza.

"On 6 and 7 January 2009, the Council held a public debate at the ministerial level on the item entitled 'The situation in the Middle East, including the Palestinian question'. During the debate, the Secretary-General, the President of the Palestinian National Authority, the representative of Israel, and representatives of other States Members of the United Nations (including Ministers for Foreign Affairs, in particular of the Arab League States) made statements.

"On 8 January 2009, after thorough consultations, including at the ministerial level, the Council held a meeting presided over by the Minister for Foreign Affairs of France, Bernard Kouchner, at which it adopted resolution 1860 (2009) by 14 votes in favour, with 1 abstention. In the resolution, the Council called for an immediate, durable and fully respected ceasefire, leading to the full withdrawal of Israeli forces from Gaza.

"On 13 January 2009, during consultations of the whole, the Council was briefed by the Secretary-General before his visit to the Middle East. In their statements, Council members welcomed the efforts of the Secretary-General. On 15 January, in consultations of the whole, the Council was briefed by the Assistant Secretary-General for Political Affairs, Haile Menkerios, on the situation in Gaza, following the attacks on the headquarters of the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA). During the consultations, there was an agreement on elements for remarks to be made by the President to the press. The President of the Council expressed grave concern, in particular following the military operations against hospitals, a building hosting journalists and the headquarters of UNRWA.

"On 21 January 2009, the Council held a public meeting to receive a briefing by the Secretary-General following his visit to the Middle East. During the consultations of the whole that followed, members of the Council agreed to issue a statement to the press, in which they welcomed the ceasefire in Gaza, expressed their strong appreciation for the efforts of the Secretary-

General and reiterated their grave concern at the humanitarian situation in Gaza.

"On 27 January 2009, the Council held a meeting at which it heard briefings by the Under-Secretary-General for Humanitarian Affairs and Emergency Relief Coordinator and by the Commissioner-General of UNRWA, Karen AbuZayd, on the situation in Gaza. It was the first time that a Commissioner-General of UNRWA had been invited to address the Council. Both the Under-Secretary-General and the Commissioner-General expressed great concern about the humanitarian situation in Gaza and stressed the importance of free access for humanitarian aid. The meeting was followed by consultations of the whole.

"On 18 February 2009, the Council heard a briefing on the Middle East by the Special Coordinator for the Middle East Peace Process, Robert Serry. He reported to the Council that a number of issues, including the humanitarian situation in Gaza, Palestinian reconciliation, and the new political situation in Israel, needed to be addressed for the peace process to advance and emphasized the importance of a durable and sustainable ceasefire as called for in resolution 1860 (2009). With regard to Lebanon, he noted that the situation remained relatively stable despite increased tension following the crisis in Gaza. During the consultations of the whole that followed, many Council members stressed the need for an effective ceasefire, unimpeded access for humanitarian assistance, the opening of the crossings into Gaza and Palestinian unity.

"On 25 March 2009, the Council held its 6100th meeting to consider the agenda item entitled 'The situation in the Middle East, including the Palestinian question'.

"The Council heard a briefing by B. Lynn Pascoe, Under-Secretary-General for Political Affairs. Mr. Pascoe began the briefing by stating that 'two months after unilateral ceasefires were declared in Gaza, we face a worrying situation of impasse and uncertainty. Despite international engagement and support, very little concrete progress has been made on key issues outlined in Security Council resolution 1860 (2009).' In conclusion, he stressed that 'it is important that the Quartet and the international community act with unity of purpose to help stabilize Gaza and reinvigorate the peace process. We need to have both Israeli and Palestinian Governments that are clearly committed to the two-State solution. We need a continuation of negotiations, the implementation of commitments on the ground and a strategy for de-escalating tensions and addressing the urgent humanitarian needs in Gaza.'

"Turning to Lebanon, he said that the killing by a roadside bomb of the Deputy Representative in Lebanon of the Palestine Liberation Organization (PLO) on 23 March 2009 had interrupted the prevailing relative calm in the country.

"Following the briefing, the Council heard statements by the Permanent Observer of Palestine, and the Permanent Representative of Israel.

"Statements were made by Council members, the President, in his national capacity, and the representatives of Egypt and Lebanon.

"Upon resumption of the meeting, the Council heard statements by the representatives of Cuba (on behalf of the Non-Aligned Movement), the Syrian Arab Republic, the Czech Republic (on behalf of the European Union), Brazil, Morocco, Qatar and Bangladesh. The Council then heard statements by Paul Badji, Chairman of the Committee on the Exercise of the Inalienable Rights of the Palestinian People, the representatives of Indonesia, Ecuador, Malaysia, Algeria, Mauritania, South Africa, Norway, the Islamic Republic of Iran, Nicaragua, Jordan, Australia, the Republic of Korea, Mali, Pakistan and the Bolivarian Republic of Venezuela (S/PV.6100-SC/9626).

"On 20 April 2009, the Council heard a briefing on the situation in the Middle East by B. Lynn Pascoe, Under-Secretary-General for Political Affairs. Mr. Pascoe reported that very little progress had been made on the key elements of resolution 1860 (2009), namely the commitment of the parties to a durable and sustainable ceasefire, the opening of the crossings for humanitarian access and provision of materials for recovery, and intra-Palestinian reconciliation. He conveyed the Secretary-General's expectation that the Middle East peace process would resume, with the aim of achieving an independent and viable Palestinian State living side by side in peace with a secure Israel and a comprehensive Arab-Israeli peace as envisaged in Security Council resolutions. He stated that the situation in Gaza and southern Israel remained fragile in the absence of a proper ceasefire regime, and noted that 30 rockets and mortars had been fired by Palestinian militants at southern Israel during that period. He also highlighted Egyptian efforts to combat the continued arms smuggling across the Gaza border, and informed the Council that settlement activity had continued in the West Bank and East Jerusalem during the reporting period and must be frozen. After the meeting, the Council held informal consultations. Members drew attention to the need to achieve a stable ceasefire, implement the provisions of Council resolutions 1850 (2008) and 1860 (2009) and open Gaza's border crossings to allow for the entry of more humanitarian aid and essential goods and materials.

"On 11 May 2009, the Security Council held a ministerial-level meeting on the Middle East peace process chaired by the Minister for Foreign Affairs of the Russian Federation, Sergei Lavrov. Speaking at that event, the Secretary-General, Ban Ki-moon, stressed the need to generate momentum in the Israeli-Palestinian talks, warning that the situation on the ground could worsen easily without fresh efforts by both sides as well as by the international community. After the inconclusive results of the previous year's negotiations and the bloodshed in Gaza, the previous three months had witnessed almost no progress on the two key resolutions — 1850 (2008) and 1860 (2009).

"The Secretary-General also referred to the deep crises of confidence among 'ordinary people on the ground'. He said that Palestinians continued to see unacceptable unilateral actions in East Jerusalem and the remainder of the West Bank, such as 'house demolitions, intensified settlement activity, settler violence and oppressive movement restrictions due to permits, checkpoints and the barrier'. He stressed that the time had come for Israel to fundamentally change its policies in that regard. However, he also emphasized that ordinary Israelis needed reassurance that a future Palestinian State would guarantee their right to live in peace and security, and he stated that 'indiscriminate rocket attacks that have caused loss of life, civilian suffering and damage to

property in Israel are not only deeply unacceptable, but also totally counterproductive, and must cease'.

"He also stated that the challenge was to begin to implement transformative changes on the ground; and to kick-start a renewed and irreversible drive to achieve an Israeli-Palestinian agreement, stressing that resolving the Israeli-Palestinian conflict was fundamental to the well-being of both peoples, the region and the world.

"In their interventions, members of the Council reaffirmed their hope that the commitments made by the parties would be kept and stated that the parties must pursue an irreversible effort towards the two-State solution, including by fully implementing commitments on the ground. Council members also voiced their concern about the situation in and around Gaza, including continued arms smuggling into Gaza and continued Hamas rocket fire from Gaza into Israel, as well as Israeli settlement activities undermining the contiguity and viability of the Occupied Palestinian Territory and jeopardizing the two-State solution, and stressed the need for Palestinian reconciliation.

"The Security Council adopted a Presidential Statement (S/PRST/2009/14) at the end of its session, read by Mr. Lavrov, in which the Council stressed the urgency of reaching comprehensive peace in the Middle East. It stated that vigorous diplomatic action was needed to attain the goal set by the international community of lasting peace in the region, based on an enduring commitment of mutual recognition and on previous agreements and obligations.

"The Council also voiced support for the Russian Federation's proposal to convene, in consultations with the Quartet and the parties, an international conference on the Middle East peace process in Moscow later that year.

"The Council continues to pay close attention to developments in the situation in the Middle East; the next meeting on this question is scheduled to be held on 27 July 2009."

4. In a note verbale dated 30 April 2009 to the parties concerned, I sought the positions of the Governments of Egypt, Israel, Jordan, Lebanon and the Syrian Arab Republic, as well as of the Palestine Liberation Organization, regarding any steps taken by them to implement the relevant provisions of the resolution. As at 31 August 2009, replies had been received from Israel and the Palestine Liberation Organization. The note verbale dated 20 July 2009 from the Permanent Mission of Israel to the United Nations reads as follows:

"As shown in the meeting records, Israel voted against this resolution, as it has done on similar resolutions adopted in the past by the General Assembly. The Permanent Mission of Israel wishes to reiterate the considerations guiding this voting practice in light of the current situation.

"Despite the continuation of intensive Israeli-Palestinian dialogue during 2008, Palestinian terrorism continued unabated and remains an alarming reality. During 2008, over 3,100 rockets and mortars were launched against Israel by Hamas, including over 360 during the so-called 'lull' initiated in June 2008. Deliberately targeting Israeli civilian targets and cynically launched from within Palestinian civilian concentrations, these attacks came in the wake

of seven years of similar attacks, during which over 8,900 rockets and mortars had been fired at Israel from Gaza.

"This campaign of terror reached a pinnacle towards the end of 2008, with over 300 rockets and mortars hitting Israel in the single week between December 21 and December 27, leaving it with no choice but to act to protect its civilians from the unceasing barrage of rocket fire. Moreover, during 'Operation Cast Lead' an additional 571 rockets and 205 mortars landed in Israel, reaching as far as the cities of Ashdod, Beer Sheva and Gedera.

"This campaign of violence has not been limited to rocket fire from Gaza. Palestinian terrorists carried out numerous terror attacks during 2008, killing 12 and wounding dozens of Israeli civilians. On 4 February 2008, a Palestinian suicide bomber killed an Israeli woman in Dimona; on 6 March 2008, a Palestinian terrorist went on a shooting rampage in a religious seminary in Jerusalem, killing eight high school students; and in three separate incidents in July 2008 and March 2009, Palestinians driving bulldozers plowed into Israeli bystanders, killing three and wounding numerous others.

"Hamas, entrenched in Gaza with the support of the Islamic Republic of Iran, continues to stockpile weapons of ever-increasing lethality and range, operating a full-fledged weapons-smuggling operation through the extensive tunnel network running under the Egypt-Gaza border.

"In addition, Hamas has been holding kidnapped Israeli corporal Gilad Shalit incommunicado for over three years, violating basic humanitarian practice of permitting the International Committee of the Red Cross access to see the captive. The Hamas regime continues to reject the Quartet conditions, persists adamantly in its calls for Israel's destruction and remains vigilant in its commitment to seeing this grim vision through. It is disturbing, if not to say appalling, that resolution 63/29 makes no mention of any of the above.

"Notwithstanding this concerted and enduring campaign of violence against Israeli civilians and testifying to Israel's commitment to humanitarian principles even in the face of it, Israel continues to facilitate the entry of large quantities of humanitarian supplies into Gaza, including in the very midst of the recent Gaza conflict. Between the June 2007 Hamas takeover of Gaza and September 2008, 35,542 trucks bearing 813,870 tons of humanitarian supplies entered Gaza through the crossings from Israel. During Operation Cast Lead alone, 1,503 trucks carried 37,159 tons of humanitarian aid into Gaza via the Kerem Shalom and Karni crossings, alongside 1,535,750 litres of heavy-duty diesel for the Gaza power station.

"In addition, over the past months, and especially in recent weeks, the Government of Israel has authorized a major easing of security-related restrictions in the West Bank, dismantling two thirds (27 of 41) of the formerly existing checkpoints and some 140 dirt roadblocks during the past year. These positive developments, noted and lauded by the Quartet Envoy, accompany a marked improvement in economic indicators in the West Bank. Israel has taken these steps as confidence-building measures, with the aim of further encouraging Palestinian economic activity, despite the fact that in the past, such gestures have directly resulted in an upsurge in terror attacks by Palestinians against Israelis. The Permanent Mission expresses its hope that

the Palestinians will depart from prior practice and seize this opportunity to focus their collective energies in such ways as may serve to nurture peaceful coexistence with Israel.

"The Government of Israel has repeatedly extended an open and unequivocal invitation to launch peace talks with the Palestinian Authority. Guiding Israel in this respect is a vision of a reinvigorated political process alongside a rejuvenated effort to focus on economic cooperation and development. Regrettably, these overtures have been rejected by the Palestinian Authority.

"Despite an ongoing and acute threat to its security, Israel has gone to great lengths to assist in extending humanitarian assistance, fostering conditions for Palestinian economic development and cooperation, and engaging in political dialogue with the Palestinian Authority. Regrettably, these overtures have yet to achieve their goal of reaching comprehensive, just and lasting peace. Inexcusably, they are given no mention in resolution 63/29.

"Thus, far from acting as a vehicle for promoting a peaceful resolution of the Palestinian-Israeli conflict, resolution 63/29 joins the numerous one-sided resolutions passed annually by the General Assembly on Israel which serve only to undermine the credibility of the United Nations as an impartial agent for the advancement of peace. The Permanent Mission takes this opportunity to urge the Secretary-General to use his good offices to encourage a cessation of this counterproductive practice."

The note verbale dated 26 June 2009 from the Permanent Observer of Palestine to the United Nations reads as follows:

"The urgency of ending the tragedy and injustice inflicted upon the Palestinian people after more than 61 years of statelessness and dispossession and more than 42 years of military occupation and oppression by Israel, the occupying Power, cannot be overstated. For too long the Palestinian people have suffered crises, loss and subjugation, their human rights and fundamental freedoms brutally violated, and for too long the inability to achieve a just solution to the question of Palestine, despite persistent and noble efforts, has represented a tragic failure on the part of the international community, with grave consequences for not only the Palestinian and Israeli peoples, but for the Middle East region and beyond. The question of Palestine, which lies at the core of the Arab-Israeli conflict as a whole, is indeed central to the quest for regional and international peace, security and stability in our contemporary world, and a peaceful settlement is long overdue.

"There is international consensus that achieving a just and peaceful settlement of the question of Palestine, in accordance with international law and relevant United Nations resolutions, is a political, security, legal, human rights, humanitarian and moral imperative for the international community. This is clearly reflected in the General Assembly's annual adoption of the resolution on the 'Peaceful settlement of the question of Palestine' by an overwhelming majority.

"From Palestine's perspective, the role of the United Nations remains central for the promotion of a peaceful settlement. As affirmed in numerous resolutions, the responsibility of the United Nations towards the question of

Palestine is an enduring one until the achievement of a just, lasting and comprehensive solution. During this critical period, Palestine reaffirms the importance of, as well as deep gratitude for, the efforts of the United Nations system, including its principal organs and specialized agencies, vis-à-vis the question of Palestine in, inter alia, the humanitarian, political, socio-economic, human rights and development fields. However, more concerted efforts are essential if the Charter, United Nations resolutions and the rule of law are to be truly upheld, and United Nations organs, including, inter alia, the General Assembly, Security Council, Human Rights Council, Economic and Social Council, International Court of Justice and the International Criminal Court, must continue to exert all efforts in this regard.

"Israel's flagrant and deliberate violation of its legal obligations and United Nations resolutions must not continue to be tolerated. This has only emboldened Israeli impunity and lawlessness and further complicated the conflict. Such violations by the occupying Power must be directly addressed with the appropriate actions and measures at the international community's disposal if the responsibility for achieving a peace settlement based on the two-State solution is ever to be fulfilled.

"Guided by the purposes and principles of the Charter, international law, including humanitarian and human rights law, and relevant United Nations resolutions, as well as the Madrid terms of reference, including the principle of land for peace, the Arab Peace Initiative and the Quartet Road Map, the international community must intensify its collective efforts to promote a peace that brings to an end the occupation of the Palestinian Territory, including East Jerusalem, that began in 1967, and the establishment of the independent State of Palestine, as well as a just and agreed solution to the plight of the Palestine refugees on the basis of General Assembly resolution 194 (III). The parameters and core requirements for achieving such a peace are clearly stipulated in resolution 63/29, just as they have been for decades.

"Indeed, despite the passage of time, cyclical crises and the deterioration of the situation on the ground in the Occupied Palestinian Territory, including East Jerusalem, the solution to the Israeli-Palestinian conflict remains the same: two States for two peoples to live side by side in peace and security. This solution finds its foundation in resolution 181 (II) of 29 November 1947 and has been reaffirmed and called for thereafter in numerous United Nations resolutions, including Security Council resolutions 242 (1967), 338 (1973), 1397 (2002), 1515 (2003) and 1850 (2008), General Assembly resolutions on the question of Palestine and on the right of the Palestinian people to self-determination, as well as in the 2004 advisory opinion of the International Court of Justice on the legal consequences of the construction of a wall in the Occupied Palestinian Territory. The two-State solution is also at the crux of the Arab Peace Initiative and the Road Map.

"Regrettably, however, the months since the adoption of resolution 63/29 have been marked by the dramatic deterioration of the situation at all levels in the Occupied Palestinian Territory and by the obstruction of the efforts to achieve a peaceful settlement.

"With the exception of a few encouraging developments — such as: (a) the adoption by the Security Council of resolution 1850 (2008), in which

the Council, inter alia, declared its support for the Annapolis process and the resolution of all outstanding issues, including all core issues; called on the parties to fulfil their obligations under the Road Map and to refrain from any steps that could undermine confidence or prejudice the outcome of negotiations; and urged the intensification of diplomatic efforts towards achievement of a comprehensive, just and lasting peace in the Middle East; (b) the adoption by the Security Council of resolution 1860 (2009) at the height of the Israeli military aggression against the Gaza Strip, in which the Council, inter alia, called for a permanent and durable ceasefire, unimpeded provision of humanitarian assistance, arrangements for the sustained reopening of Gaza's crossing points, and renewed and urgent peace efforts; (c) the renewal of the Arab Peace Initiative in March 2009 by the League of Arab States Summit despite the marked deterioration of the situation; (d) the adoption by the Security Council of presidential statement PRST 2009/14, in which the Council, inter alia, reaffirmed the two-State solution, the basis for achieving a peaceful settlement, and the irreversibility of the peace process; (e) ongoing Egyptian efforts to promote a ceasefire, as well as Egyptian and regional efforts to foster Palestinian reconciliation and unity; (f) the more active, balanced and just approach being undertaken by the United States administration of President Barack Obama towards the Israeli-Palestinian conflict and the Arab-Israeli conflict as a whole, based on a clear commitment to the two-State solution for the achievement of peace; and (g) the comprehensive and forward-looking statement by the Quartet on 26 June 2009 in Trieste, Italy — the period since the adoption of resolution 63/29 has witnessed a series of negative developments and setbacks as a result of Israel's continued breach of all rules and norms of international law, in particular the Fourth Geneva Convention, which has had a detrimental effect on the situation on the ground and the drive for peace.

"Even the minimal progress made in the Israeli-Palestinian peace process since its relaunch at the November 2007 Annapolis Conference has been undermined by Israel's illegal and aggressive policies in the Occupied Palestinian Territory, particularly its colonization campaign throughout the West Bank, its blockade in collective punishment of the entire civilian population in the Gaza Strip, and its daily humiliation and degradation of the Palestinian people. Such actions constitute gross violations of international law, including systematic human rights violations and war crimes against the Palestinian people, and of United Nations resolutions, and show contempt for the will of the international community.

"At the same time, Israel's unlawful actions have seriously compromised its credibility as a partner in the peace process. Rather than conducting negotiations in good faith and refraining from taking measures prejudicing the outcome of negotiations on the core issues — Jerusalem, settlements, refugees, borders, security and water — and repeatedly undermining confidence, the occupying Power has instead continued to brutally oppress the Palestinian civilian population and to establish ever more facts on the ground, creating more obstacles to contend with, deepening mistrust and preventing any real progress from being achieved, despite the convening of 27 meetings between the two sides since the Annapolis Conference.

"In comparison, the Palestinian leadership has exerted all efforts to uphold its obligations and commitments under international law, agreements reached and the Road Map. It has conducted negotiations in good faith, repeatedly reaffirmed its commitment to the two-State solution for peace, striven to promote a positive environment for negotiations, made extensive and well-documented progress in fulfilment of its obligations regarding promotion of security and law and order in the areas under the Palestinian Authority, diligently worked with the support of the international donor community to build the institutions of the future Palestinian State, and also continued to strive for much-desired national reconciliation and unity. All of this has been achieved by the Palestinian leadership despite the obstacles and measures imposed by Israel that have undermined these efforts and despite Israel's blatant intransigence and violation of its legal obligations and commitments in total contradiction of the goals and spirit of the peace process.

"In this regard, Israel, the occupying Power, has intensified settlement activities, construction of the Wall, home demolitions and excavations, particularly in and around East Jerusalem; it has intensified its imposition of obstacles to the movement of persons and goods throughout the West Bank and its imposition of the two-year blockade on Gaza; it has continued to carry out military raids and assaults killing and injuring Palestinian civilians; it has continued to arrest, detain and imprison thousands of Palestinian civilians, with over 11,000 Palestinians, including hundreds of women and children, in Israeli jails, suffering inhumane conditions and treatment; and it has continued to exploit Palestinian natural resources and cause extensive environmental damage in the Territory.

"All recent reports, including those by United Nations agencies on the ground such as UNRWA, Office for the Coordination of Humanitarian Affairs, Office of the United Nations Special Coordinator for the Middle East Peace Process, United Nations Children's Fund, United Nations Development Programme, World Health Organization and World Food Programme, inter alia, attest to the decline of the economic, social, political, humanitarian and security conditions, especially in Gaza, as a result of Israel's illegal and destructive policies. Poverty and unemployment rates remain inordinately high, health and education standards continue to decline, food insecurity is rampant, civilian lives continue to be threatened and lost as a result of the violence perpetrated by the Israeli occupying forces and settlers, and thousands more civilians have been displaced, which has exacerbated the hardships being endured by the Palestinian people under occupation.

"This negative trend culminated in Israel's horrific military aggression against Gaza from 27 December 2008 to 19 January 2009 (Operation Cast Lead), in which more than 1,400 Palestinian civilians, including hundreds of children and women, were killed and more than 5,500 civilians were injured. The high number of casualties was the result of direct targeting by Israel of civilian areas and objects, including UNRWA schools where Palestinian civilians were known to be sheltering from the violence, and use of excessive, indiscriminate force and lethal, even prohibited, weaponry and ammunition, including white phosphorous, against the defenceless population. This has been verified by several investigations, including by the Secretary-General's Board of Inquiry, the League of Arab States' Independent Fact-Finding

Committee on Gaza and many human rights and humanitarian organizations on the ground.

"The Israeli occupying forces also caused wanton destruction throughout Gaza. Thousands of Palestinian homes were destroyed or seriously damaged. In addition, businesses, schools, hospitals, vital infrastructure such as roads, water, sanitation and electricity networks, agricultural land and numerous United Nations facilities were destroyed. The widespread destruction rendered thousands of people homeless. Moreover, appallingly, more than six months later no reconstruction of damaged or destroyed properties has been carried out owing to Israel's ongoing blockade of Gaza, by which it has prohibited the entry of materials essential for reconstruction as well as the import and export of all other goods, with the exception of the minimum of food and medicine necessary to sustain the civilian population and other minor exceptions on a case-by-case basis.

"The massive deprivation and brutality inflicted by Israel on Gaza has traumatized and terrorized the Palestinian civilian population and the impact on the socio-economic, humanitarian, psychosocial and security situation has been disastrous. Moreover, at the time of writing this note, the peace process, which was suspended with the launch of the Israeli war against Gaza, remains frozen.

"The current situation is abnormal, unjust and untenable. The opening of Gaza's border crossings to allow for the free movement of persons and goods, including unimpeded humanitarian access, commercial flows necessary for revival of the collapsed economy and civilian needs, and import of construction materials, spare parts and adequate fuel supplies is a matter of urgency. There is no acceptable justification for Israel's continued imprisonment of the 1.5 million Palestinians in Gaza. Immediate efforts must be undertaken to ensure the sustained opening of the crossings in accordance with international humanitarian law, United Nations resolutions and the 2005 Agreement on Movement and Access. This is essential for reconstruction and healing the deep physical, psychological and societal wounds of Gaza, as well as for altering the very negative, tense environment between the two sides.

"Furthermore, Palestine emphasizes the importance of the continued pursuit of justice and accountability with regard to the war crimes committed by Israel, the occupying Power, against the Palestinian civilian population in Gaza. This is necessary for ending impunity, redressing the searing sense of injustice among the victims and allowing genuine healing to occur. That this is also essential for the long-term prospects for peace, reconciliation and coexistence is unquestionable.

"At the same time, the situation in the rest of the Occupied Palestinian Territory remains extremely precarious, owing primarily to Israel's aggressive pursuit of its illegal colonization campaign aimed at creating massive facts on the ground to alter the demographic composition, status and character of the Territory, especially in and around Occupied East Jerusalem, and thus facilitate the occupying Power's acquisition of more territory by force and prejudge the outcome of final status negotiations in its favour.

"We reiterate that Israel's colonization of the Occupied Palestinian Territory, including East Jerusalem, constitutes a grave breach of international humanitarian and criminal law, namely the Fourth Geneva Convention and Additional Protocol I, which prohibit the transfer by the occupying Power of its civilian population into the territory it occupies (articles 49 (6) and 85 (4) (a), respectively), and the Rome Statute of the International Criminal Court, under which the transfer, directly or indirectly, by the occupying Power of its own civilian population into the territory it occupies constitutes a war crime (article 8, para. 2 (b) (viii)). In addition, such illegal measures represent egregious violations of General Assembly and Security Council resolutions calling for the cessation and dismantlement of the settlements, blatant disrespect for the International Court of Justice advisory opinion of 9 July 2004 and violations of Israel's Road Map obligation to freeze all settlement activities, including so-called natural growth, and dismantle settlement 'outposts'.

"Even during the peace process, Israel has never ceased its settlement campaign, which has multiplied 17-fold at least in the period since the Annapolis Conference and continues to this day. The occupying Power continues its confiscation of Palestinian land; construction and expansion of settlements, settlement outposts and settlement infrastructure, including bypass roads and military installations and zones; the transfer of thousands more Israeli settlers to the Occupied Territory; construction of the Wall in deviation from the 1967 Green Line to entrench the settlements and advance their de facto annexation; imposition of a racist permit regime, residency restrictions and hundreds of checkpoints; demolition of Palestinian homes; and excavations, all of which are particularly intense in and around Occupied East Jerusalem. Simultaneously, armed and extremist Israeli settlers, with the protection of the occupying forces, continue to perpetrate acts of terror, harassment and intimidation against Palestinian civilians and to wantonly destroy Palestinian properties and orchards.

"On the ground, these illegal settlement colonization measures have been hugely detrimental and have affected all aspects of Palestinian life. The separation, isolation and cantonization of Palestinian communities, including the total isolation of East Jerusalem, by the settlements, Wall and checkpoints — which can only be likened to a state of apartheid — have caused the displacement of thousands of Palestinian civilians and widespread economic and social ills. Moreover, the contiguity, integrity and unity of the Occupied Palestinian Territory have been severely undermined, seriously threatening the prospects for physical realization of the two-State solution.

"As such, in terms of the peace process, the impact of Israel's colonization has also been hugely detrimental, constituting the main obstruction to a peaceful settlement. These provocative, illegal Israeli actions have undermined the drive for peace, poisoned the atmosphere between the two sides and tainted the process as a whole. In this regard, it is imperative to note that the issue of settlements is not only a final status issue in the peace process but is also intricately related to and at the crux of nearly all other final status issues, including Jerusalem, borders, water and security.

"In reality, Israel's colonization is totally contradictory to the objective of the peace process — achievement of the two-State solution of an independent State of Palestine living side by side with Israel in peace and security and on the basis of the 1967 borders — and to the principle of land for peace sustaining that process. We thus reaffirm that continuing negotiations under such conditions would be futile and unacceptable, and there is an international consensus that such a process will never achieve its goals. The Palestinian leadership has always negotiated in good faith but it cannot continue to engage blindly in this process while Israel continues to destroy the contiguity, viability and prospects for the future independent State of Palestine.

"The international community must act swiftly in response to the international consensus that exists with regard to the two-State solution to the Israeli-Palestinian conflict, including that embodied in resolution 63/29, in order to salvage the two-State solution and the prospects for peace and stability in our region. Continued declarations or mild appeals to Israel will no longer suffice and further appeasement will only deepen this problem. Israel, the occupying Power, must be compelled to cease immediately all settlement and related colonization activities in the Occupied Palestinian Territory, including East Jerusalem, and abide by its obligations under international law in this regard, as well as under the Road Map. Confronted with continued defiance, the international community, including the Security Council and Quartet, must take real action, including practical and concrete measures, to bring to an end Israel's belligerent, unlawful practices.

"The provisions of resolution 63/29 thus remain valid, as do those of the other United Nations resolutions relevant to the question of Palestine, and the legal and political principles therein constitute the foundations of the peace process and the keys to resolving this prolonged conflict. Creating the appropriate environment for the advancement of negotiations and overcoming the obstacles that have repeatedly impeded progress towards a peaceful settlement require adherence to and full respect for these parameters and principles and fulfilment of the obligations and commitments they entail.

"The support of the international community in this endeavour remains critical and Palestine remains encouraged by the overwhelming support in this regard, as reflected, inter alia, by the vote on resolution 63/29. The General Assembly must continue striving to promote a peaceful settlement of the question of Palestine in all its aspects. Our conviction remains firm that concerted and coordinated action by the international community can and will tangibly contribute to bringing an end to the 1967 Israeli occupation and enabling the Palestinian people to exercise their inalienable rights in their independent State of Palestine, with East Jerusalem as its capital, fundamental to a just, lasting and comprehensive settlement of the Israeli-Palestinian conflict and the Arab-Israeli conflict as a whole.

"In conclusion, we reaffirm the Palestinian leadership's commitment to a peace process based on Security Council resolutions 242 (1967), 338 (1973), 1397 (2002), 1515 (2003) and 1850 (2008), the Madrid terms of reference, including the principle of land for peace, the Arab Peace Initiative and the Road Map. We thus renew the call upon the international community to seize the slim prospects for peace that remain and not allow them to vanish as a

result of illegal, unilateral and destructive Israeli actions. Moreover, we reaffirm the enduring resilience of the Palestinian people, in spite of the formidable challenges, to ultimately realize their inalienable rights, including their rights to self-determination and to return, and to fulfil their legitimate national aspirations to live in peace, freedom and prosperity in their homeland and in harmony with their neighbours."

II. Observations

5. During the reporting period, diplomatic developments and events on the ground underscored the importance of a peaceful settlement of the question of Palestine. The past year witnessed the discontinuation of Israeli-Palestinian negotiations undertaken within the framework of the Annapolis process, a destructive conflict in Gaza and southern Israel, a deepening internal divide despite efforts towards Palestinian unity and the formation of a new Israeli Government following Knesset elections. In recent months, there have been renewed efforts by the international community to achieve the vision of two states living side by side in peace and security.

6. On 4 November 2008, Israel conducted a military incursion into Gaza for the purpose of destroying a tunnel allegedly used for abducting Israeli soldiers. After several months of relative calm, between 4 and 30 November, 138 rockets and 153 mortars were subsequently fired by Palestinian militants into Israel. I strongly condemned these rocket attacks by Palestinian militants as totally unacceptable and called upon all parties to fully respect the *tahdiya*, or calm, which had been brokered by Egypt between Israel and Hamas in June 2008.

7. Rocket fire from Gaza into southern Israel and Israeli air strikes accelerated throughout December. On 27 December 2008, the violence sharply escalated with the commencement of Israeli military operation Cast Lead, which included the launch of massive, coordinated strikes by the Israeli air force in Gaza. Notwithstanding the Security Council's press statement on 28 December calling for both sides to halt all acts of violence, in the following days Israel heavily bombed a large number of Gaza's military and civilian installations, while Hamas launched rockets into southern Israel almost continuously. Throughout this period, I engaged in bilateral contacts with leaders from the region to urge a return to the calm and to avoid further escalation and bloodshed.

8. On 31 December, I briefed the Security Council, deploring the fact that the civilian population of Gaza was trapped between the irresponsibility displayed in the indiscriminate rocket attacks by Hamas militants and the disproportionality of the continuing Israeli military operation. I also emphasized that life in southern Israel had become extremely difficult, with Israelis living in constant fear of rocket strikes. I called on all parties to fully respect international humanitarian and human rights law.

9. The conflict further escalated on 3 January 2009, when the Israel Defense Forces launched a major ground offensive into Gaza. The following weeks were marked by intense fighting, high numbers of civilian casualties and extensive damage to the civilian infrastructure in Gaza.

10. On 8 January 2009, the Security Council adopted resolution 1860 (2009), in which it called for a complete halt to the violence, an immediate and durable ceasefire, the unimpeded provision of humanitarian assistance, the sustained reopening of the crossing points and efforts to curb the illicit trafficking of weapons into Gaza.

11. Following the adoption of resolution 1860 (2009), I undertook an extended eight-country mission to the region to deliver the message that the fighting must stop and the resolution must be fully respected and implemented. I met with the leaders of Egypt, Jordan, Israel, the Palestinian Authority, Turkey, Lebanon, and the Syrian Arab Republic and, in the immediate aftermath of the end of major hostilities, I visited Gaza City and southern Israel. Throughout this mission, I sought to maximize coordination of the diplomatic efforts to end the crisis and to make clear the expectations of the United Nations as embodied in resolution 1860 (2009).

12. Major military operations ended on 18 January with the declaration of unilateral ceasefires by the Israeli cabinet and Hamas. Since January 2009, violence in Gaza has decreased significantly; however, sporadic firing from both sides has continued, underscoring the overall fragility of the situation. I believe it to be of the utmost importance that these unilateral ceasefires are translated into lasting arrangements based on the framework of resolution 1860 (2009).

13. The three-week conflict in Gaza resulted in extensive suffering and hardship. While figures from different sources vary, an estimated 1,300 Palestinians lost their lives and 5,300 were injured in the conflict, and on the Israeli side, 14 Israelis were killed and more than 530 were injured. A large proportion of the casualties, particularly on the Palestinian side, were civilians. I deeply regret the loss of civilian life during the conflict.

14. The intensity and destruction of the conflict substantially exacerbated the existent humanitarian crisis in Gaza, with deterioration in food security, physical and mental health, and access to basic services and economic livelihoods all being observed. During the conflict, practical arrangements were put in place between United Nations humanitarian agencies and Israel for the delivery of some relief supplies to the beleaguered civilian population. Following the end of the hostilities, United Nations agencies estimated that 3,700 houses and two health-care centres had been destroyed, and that 48,700 homes, 15 hospitals, 41 health-care centres and 273 schools had sustained varying degrees of damage.

15. On 2 March 2009, I attended the conference for the reconstruction of Gaza in Sharm el Sheikh, where the Palestinian Authority presented the Palestinian Early Recovery and Reconstruction Plan. The conference yielded pledges worth $4.5 billion. At the time of writing, only a small percentage of these funds have materialized, at least in part due to donor concerns about the ability to get the necessary reconstruction materials into Gaza.

16. The numbers of truckloads of goods entering Gaza have increased since the period immediately preceding and during Operation Cast Lead. However, the import of goods still remains less than one fifth of that which occurred as part of normal commerce and trade prior to the imposition of the comprehensive closure regime in May 2007. Today, the overwhelming majority of imports into Gaza are limited to food and sanitation items, with still little or no entry for all other goods, including items for early recovery and reconstruction.

17. Some seven months after the conflict, this situation is unacceptable. Consistent with resolution 1860 (2009), the November 2005 Agreement on Movement and Access, and public statements made by the Quartet, I have repeatedly called for a sustained reopening of all crossing points in Gaza and for mechanisms to be put in place to prevent the illicit trafficking of arms into Gaza.

18. In addition, the United Nations has presented the Government of Israel with a proposal to begin a $77 million first instalment of early recovery and reconstruction by working to complete previously suspended United Nations projects to build housing, schools and clinics across Gaza. In implementing these projects, United Nations agencies will utilize their own monitoring, verification and quality assurance processes in order to ensure integrity of programming. I hope to receive a positive response to this reasonable proposal.

19. From the outset of the conflict in Gaza, I called on all combatants to respect the sanctity of United Nations premises. However, during the course of the conflict a number of incidents occurred in which United Nations personnel, premises or operations were affected. In response, I established an internal Board of Inquiry to review and investigate nine of these incidents.

20. On 4 May 2009 I released a summary of the Board's report. The Board found that in seven incidents, the death, injuries and damages were caused by military actions of the Israel Defense Forces, using munitions launched from the air or fired from the ground. In one incident, the report concluded that damage to a World Food Programme facility was caused by a Palestinian faction, most likely Hamas, and in another incident, the Board was unable to reach any conclusions. The Board also made a number of recommendations, including with respect to pursuing claims for damages incurred by the United Nations and further improving coordination mechanisms between the United Nations and the Government of Israel in order to help ensure the safety and security of United Nations personnel and premises. I am actively pursuing these recommendations.

21. I have fully supported the United Nations fact-finding mission on the Gaza conflict led by Justice Richard Goldstone, pursuant to Human Rights Council resolution S-9/1 (2009), and its broad investigation into all alleged human rights and international humanitarian law violations that took place before, during and after the military operations in Gaza between 27 December 2008 and 18 January 2009. I look forward to the report of the fact-finding mission.

22. I also support continuing mediation efforts to secure the release of Israeli Corporal Gilad Shalit in exchange for some of the 11,000 Palestinian prisoners held in Israeli jails. I regret that three years after his capture, neither the International Committee of the Red Cross nor any other international body has been granted access to Corporal Shalit.

23. During the reporting period, Egypt convened six rounds of reconciliation talks between Fatah, Hamas and other Palestinian groups. Regrettably the talks have only yielded limited progress. I continue to fully support the efforts of Egypt on this vital issue and to urge the factions to quickly conclude an agreement to reunite within the framework of the legitimate Palestinian Authority, as called for in resolution 1860 (2009) and by the Quartet and League of Arab States. The United Nations is ready to engage a government under the authority of President Abbas that unites Gaza and the West Bank within such a framework.

24. A key achievement during the reporting period has been the beginning of Palestinian self-empowerment, which has taken place in the West Bank under the leadership of President Abbas and Prime Minister Fayyad and has included important reforms in fiscal management, development planning and the security sector. This positive momentum must not be imperilled by the financial crisis facing the Palestinian Authority. When the Ad Hoc Liaison Committee met in Oslo on 8 June 2009, Prime Minister Fayyad reported that the Palestinian Authority faces a critical budget crisis and still has great difficulty paying monthly salaries, which has a severe impact on its planning processes and undermines its reform agenda.

25. In July 2009, the International Monetary Fund reported that in 2009 the recurrent budget deficit for the Authority was approximately $1.6 billion and that $900 million in external financing was required for the remainder of the year. I very much welcome the recent transfers of funds by major donors to support the Palestinian Authority and I appeal to other donors to urgently fulfil pledges of budget support.

26. The Israeli system of creating physical obstacles to movement in the West Bank and imposing elaborate permit requirements on Palestinians has continued to be entrenched during the reporting period, including for movement in and around East Jerusalem. However, I welcome recent measures by the Israeli Government to ease movement restrictions around Nablus, Jericho, Qalqiliya and Ramallah. The positive steps taken by Israel, if sustained and expanded, would have a significant impact on Palestinian freedom of movement and economic development. As at August 2009, 613 obstacles to movement remained in the West Bank, 68 of which were permanently staffed checkpoints. According to the International Monetary Fund, if Israel continues easing restrictions, real growth in the gross domestic product in the West Bank could stand at 7 per cent in 2009. This would represent the first significant improvement in living standards in the West Bank since 2006.

27. I appreciate the work of Quartet Representative Tony Blair in his efforts to support continued economic development in the Occupied Palestinian Territory and encourage the parties to work with him to bring about transformative change on the ground.

28. During the reporting period, the Palestinian Authority continued to make real strides in the implementation of its security plan with considerable international assistance, in particular from the United States of America. I urge the Palestinian Authority to continue to make every effort to improve law and order and to fight violent extremism in accordance with its Road Map obligations. In line with the increasing capabilities of the Palestinian security forces, I also encourage Israel to further ease movement restrictions, as well as to reduce search and arrest operations in the West Bank.

29. In Gaza, Hamas has extended its de facto control over institutions and society. Actions taken to impose internal order, including the violent confrontation with the radical group Jund Ansar Allah on 14 August 2009, have taken place outside a legitimate legal framework. There is little accountability of the de facto authority towards the population regarding such actions. In recent months, despite sporadic incidents, Hamas has largely enforced a state of calm vis-à-vis Israel and it is vital that this is built upon. The only sustainable future for Gaza is for the Strip to be reunited with the West Bank within the framework of Palestinian, regional and international legitimacy. Hamas has key responsibilities in this regard which have

not yet been met and I continue to call on the Hamas leadership to respond positively to the urgings of the international community.

30. The reporting period has also been one of political transition in Israel. A Likud-led coalition Government headed by Prime Minister Netanyahu was sworn into office on 31 March 2009 following Israeli elections held on 11 February. I welcomed the formation of the new Israeli Government and stated my expectation that it would adhere to Israel's previous commitments regarding the peace process.

31. On 14 June 2009, Prime Minister Netanyahu delivered a speech in which he stated that the Israeli Government would accept a Palestinian state, but under several significant conditions related to final status issues. It is, however, actions on the ground, together with a genuine readiness to negotiate on all core issues based on existing commitments, that will be the true test of Israel's commitment to the two-State solution.

32. In this respect, I am concerned by the failure of the new Israeli Government to commit to its obligation under the Road Map to freeze all settlement construction, including natural growth, as well as to dismantle outposts erected since March 2001. I note that the Israeli organization Peace Now reported that in the first half of 2009, the building of 596 new structures had begun in West Bank settlements, outposts and industrial areas and that there had not been any evacuations of "real" outposts.

33. Israeli actions in support of settlers in the heart of East Jerusalem are a matter of particular concern. Most recently, on 2 August 2009, Israeli security forces forcibly evicted nine Palestinian families, amounting to 53 people, from their homes in the Sheikh Jarrah neighbourhood of East Jerusalem. Under the protection of Israeli security forces, the property was handed over to a settlement organization. I repeat here the Quartet's position that such unilateral actions cannot prejudge the outcome of negotiations and will not be recognized by the international community.

34. On 29 October 2008, following a five-month suspension of demolitions obtained by Quartet Representative Tony Blair, the Israeli authorities resumed the demolition of houses lacking building permits in East Jerusalem and Area C of the West Bank. I reiterate my call on Israel to adhere to international law and its Road Map obligations, and to cease and reverse provocative actions such as demolitions and evictions.

35. Contrary to the 9 July 2004 advisory opinion of the International Court of Justice, the Barrier deviates significantly from the 1967 Green Line into Occupied Palestinian Territory in the West Bank. It continues to restrict Palestinian access to East Jerusalem, key social services and agricultural land. In accordance with the provisions of General Assembly resolution ES-10/17 of 15 December 2006, on 9 April 2009 I provided a progress report on the work of the United Nations Register of Damage Caused by the Construction of the Wall in the Occupied Palestinian Territory. At the time of writing, the Register of Damage had collected over 1,100 claim forms in the West Bank and had approved 268 claims for inclusion in the Register.

36. Violence between Israelis and Palestinians, as well as among Palestinians, continued. Excluding casualties during Operation Cast Lead, between 1 September 2007 and 17 August 2009, 5 Israelis were killed and 125 injured, while 89 Palestinians were killed and 1,212 injured in conflict-related incidents. A total of 80 Palestinians were killed and 200 wounded in internal violence. I once again

unequivocally condemn all acts of violence and hostilities directed against civilians and remind all parties of their obligations under international law.

37. Moving now to international diplomatic activity in support of the peace process, the latter half of 2008 witnessed regular bilateral negotiations between Israeli and Palestinian negotiating teams within the framework of the Annapolis process. On 9 November 2008, President Abbas and the then Minister for Foreign Affairs Livni briefed the Quartet on their progress, which they described as substantial and promising. While noting that a comprehensive agreement would not be reached by the Annapolis target of the end of 2008, the parties committed themselves to continuous, uninterrupted negotiations on all core issues. On 16 December 2008, the Security Council passed resolution 1850 (2008) reaffirming the basic principles upon which Israeli-Palestinian peace must rest as well as the irreversibility of bilateral negotiations undertaken through the Annapolis process.

38. Talks were initially suspended during the Israeli electoral period and were then discontinued owing to Operation Cast Lead, and no negotiations on core issues have taken place in 2009. However, an important new impetus to peace efforts was given by the early and welcome initiative of United States President Obama to vigorously pursue the creation of a Palestinian State as part of a comprehensive regional peace strategy. I also welcomed President Obama's appointment of Senator George Mitchell as United States Special Envoy for the Middle East. President Obama's speech in Cairo on 4 June 2009 challenged Israelis and Palestinians alike and demonstrated the importance which the United States Administration places on a peaceful settlement to the Israeli-Palestinian conflict.

39. On 26 June 2009, the Quartet met in Trieste and affirmed its determination to work with the parties to create the conditions necessary for the prompt resumption and early conclusion of negotiations on the end goal of a two-State solution. There was strong agreement among Quartet members that both Israelis and Palestinians should implement their obligations under the Road Map, and they urged the Government of Israel to freeze all settlement activity, including natural growth, and called upon the Palestinian Authority to continue to improve law and order and to fight violent extremism.

40. During the reporting period, the Quartet also continued its valuable practice of consulting with the League of Arab States. I welcome the renewed commitment of the Arab League to pursue a just and comprehensive regional peace in accordance with the Arab Peace Initiative, as expressed most recently in its ministerial communiqué of 24 June 2009. I continue to believe strongly in the potential for activating the regional tracks of the peace process, alongside a rejuvenated Palestinian track, on the basis of land for peace. I also support the convening of an international conference in Moscow to support this effort.

41. I want to record my deep appreciation to Robert H. Serry, the United Nations Special Coordinator for the Middle East Peace Process as well as to the Commissioner-General of UNRWA, Karen Koning AbuZayd, and all United Nations staff who continue to provide indispensable service in the Occupied Palestinian Territory under difficult and sometimes dangerous circumstances. Palestinian and international United Nations staff members have faced growing restrictions as concerns their free movement and access in the service of the United Nations. I have repeatedly protested these restrictions to the Government of Israel and look forward to improvements in this regard.

42. I am particularly indebted to the Director of UNRWA Operations in Gaza and his staff for bravely continuing their work throughout Operation Cast Lead. I want to pay special tribute to the UNRWA staff member killed and the 11 others injured while serving the Palestinian people during the Gaza conflict.

43. I call on the parties to honour all existing agreements and previous commitments and pursue an irreversible effort towards the two-State solution, including by fully implementing their obligations on the ground and by resuming, vigorously pursuing, and concluding negotiations to resolve all core issues of the Israeli-Palestinian conflict, including Jerusalem, borders and refugees. A true end to violence and lasting security for both Palestinians and Israelis will only come through a just, comprehensive and peaceful settlement to the Arab-Israeli conflict. After the failure of efforts in 2008 to secure an agreement and the difficulties encountered in 2009 in securing a resumption of negotiations, it is vital that meaningful progress is now made towards the goal of a negotiated agreement, that the parties live up to their responsibilities in this regard, and that there is coordinated and effective international engagement in support of these efforts.

44. The United Nations will continue to work towards the peaceful settlement of the question of Palestine. The framework for peace remains unchanged: the establishment of two States, an independent and viable Palestine living side by side in peace and security with Israel, on the basis of the principle of land for peace and a just and comprehensive regional peace consistent with Security Council resolutions 242 (1967), 338 (1973), 1397 (2002), 1515 (2003) and 1850 (2008), the Road Map and the Arab Peace Initiative.